PART B PERMIT INSPECTION CHECKLIST

OCCIDENTAL CHEMICAL CORPORATION

INDUSTRIAL AND SPECIALTY CHEMICALS

TACOMA PLANT

EPA I.D. No. WAD009232314

605 Alexander Avenue
Tacoma, Washington 98421

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Note: Attachments 2-7 and 9-16 are from Attachment 4 of OCC Permit.
Attachment 8 is from Attachment 3 of OCC Permit.

OCCIDENTAL CHEMICAL CORPORATION
TACOMA PLANT
WAD009232314

Date of Inspection: _____

Name of Inspector: _____

Title: _____
Affiliation: _____
Address: _____
Phone Number: _____

Name of Additional
Inspector, if any: _____

Title: _____
Affiliation: _____
Address: _____
Phone Number: _____

Name of Additional
Inspector, if any: _____

Title: _____
Affiliation: _____
Address: _____
Phone Number: _____

Attendees (Name, Title, Affiliation):

_____
_____
_____
_____
_____
_____

Opening Comments, Remarks:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

SCHEDULE FOR OCC CORRECTIVE ACTION PERMIT REQUIREMENTS

(To be completed by inspector prior to inspection.)

INTRODUCTION

The Occidental Chemical Corporation permit for storage of dangerous waste includes, in Section V, requirements for corrective action for past practices. The permit conditions in this section require the Permittee to conduct environmental sampling, and to install and operate ground-water monitoring, ground-water extraction, and ground-water treatment systems in compliance with the schedule set forth in Table 3 (pages 66 - 69) of the permit. The permit conditions in the schedule for corrective action activities are constructed such that very few of the compliance dates are identified as specific calendar dates. Most of the compliance dates are framed in terms of a specified number of days after an identified occurrence (e.g., permits are received for the required activity, construction of a required system is completed, analytical data is received from the laboratory, etc.).

In order to determine, for inspection purposes, whether activities or submittals required by the corrective action permit conditions have been conducted or submitted on time, it is necessary to calculate the required compliance dates. To allow calculation of the compliance dates, this form has been developed. The form must be completed by the inspector(s) prior to using the corrective action portions of the inspection checklist (Sections V of Parts II, III, and IV).

To use the corrective action schedule form (included on the following pages), the dates of each of the activities, submittals, or occurrences noted in the center column of the form must be entered in the indicated space in the Schedule Date column. The form must be completed, starting from the beginning and continuing until items which have not yet occurred are encountered. Dates subsequent to the specified activities, submittals, or occurrences must be calculated as directed in the center column (e.g., Date 20 + 30 days means to calculate the date 30 days after the activity, submittal, or occurrence identified as Date 20). The form should be saved so that for each subsequent inspection only the activities, submittals, or occurrences since the last inspection must be identified and calculated.

The corrective action inspection checklist sections are formatted so that the questions ask, "If after Date 20... ." Checklist items (which use dates that have been completed on the form), ask questions concerning activities or submittals that should have occurred by that time if the Permittee is conducting all activities on time as required by the compliance schedule.

SCHEDULE FOR OCC CORRECTIVE ACTION PERMIT REQUIREMENTS

(To be completed by inspector prior to inspection.)

PERMIT CONDITION		COMPLIANCE DATE
V.A.	**RCRA Facility Investigation I (hereafter called RFI-I) (Excludes Investigation in the Hylebos Waterway)**	
V.A.1.i.	November 16, 1988 or receipt of Port of Tacoma Approval, which ever is later.	Date 1: _____
V.A.1.i.	Date 1 + 30 days	Date 2: _____
V.A.1.ii.	November 16, 1988 + 30 days	Date 3: 12/16/88
V.A.1.i. V.A.2.ii. AT.11 p 1	Date of completion of well 31-25	Date 4: _____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date 4 + 60 days	Date 5: _____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date of completion of well 31-50	Date 6: _____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date 6 + 60 days	Date 7: _____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date of completion of well 32-25	Date 8: _____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date 8 + 60 days	Date 9: _____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date of completion of well 32-50	Date 10: _____

V.A.1.i. V.A.2.ii. AT.11 p 1	Date 10 + 60 days	Date 11:_____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date of completion of well 33-25	Date 12:_____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date 12 + 60 days	Date 13:_____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date of completion of well 33-50	Date 14:_____
V.A.1.i. V.A.2.ii. AT.11 p 1	Date 14 + 60 days	Date 15:_____
V.A.1.iii.	Date of completion and installation of all six wells as required under V.A.1.i. (On or before Date 2)	Date 16:_____
V.A.1.iii.	Date 16 + 21 days	Date 17:_____
V.A.1.iv.	Date 17, or, as soon as a rainfall event yielding sample volumes adequate to perform required analysis occurs, if this is later than Date 17.	Date 18:_____
V.A.1.v.	Date 17, or, as soon as a negative tide occurs, if this is later than Date 17.	Date 19:_____
V.A.3.	Date 17, Date 18, or Date 19, whichever is later.	Date 20:_____
V.A.3.	Date 20 + 120 days	Date 21:_____
V.A.4.	Date of the Permittee's receipt of the Director and the Administrator's approval of the draft report of the completed RFI-I, if approved.	Date 22:_____
V.A.5.	Date 22 + 60 days	Date 23:_____
V.A.5. V.J.1.i.c.	Date by which the Permittee is required to submit comments on the Director and Administrator's proposed modifications to the report on the RFI-I. Date is to be specified in the notice to the Permittee described under permit condition V.J.1.i.	Date 24:_____

V.A.5. V.J.1.ii.	If the Permittee does not submit comments on the proposed modifications as described above; Date 24 + 5 days	Date 25:_____
V.A.5. V.J.1.iii.a.	If the permittee does submit comments on the proposed modifications as described above; Effective date specified by the Director and Administrator for the modification in the notice described under permit condition V.J.1.iii.	Date 26:_____
V.A.8.	Date of the Permittee's receipt from the Director and the Administrator a request for a corrective action plan and an implementation schedule in response to the Clean-Up Standards being exceeded at a surface sampling location(s)	Date 27:_____
V.A.8.	Date 27 + 60	Date 28:_____
V.B.	**RCRA Facility Investigation II (hereafter called RFI-II) (Investigation in the Hylebos Waterway)**	
V.B.1.	November 16, 1988; date of receipt of SRMs; or receipt of all required permits/ approvals; whichever is later	Date 29:_____
V.B.1.	Date 29 + 180 days	Date 30:_____
V.B.4.	Date 30 (or date of completion of RFI-II activities, if later) + 75 days	Date 31:_____
V.B.5.	Permittee's receipt of approval of draft RFI-II report, if approved.	Date 32:_____
V.B.5.	Date 32 + 60 days.	Date 33:_____
V.B.5. V.J.1.i.c.	Date by which the Permittee is required to submit comments on the Director and Administrator's proposed modifications to the report on the RFI-II. Date is to be specified in the notice to the Permittee described under permit condition V.J.1.i.	Date 34:_____
V.B.5. V.J.1.ii.	If the Permittee does not submit comments on the proposed modifications as described above; Date 34 + 5 days	Date 35:_____

V.B.5. V.J.1.iii.a.	If the permittee does submit comments on the proposed modifications as described above; Effective date specified by the Director and Administrator for the modification in the notice described under permit condition V.J.1.iii.	Date 36:_____
V.C.	**Pre-Corrective Action Monitoring Period Programs**	
V.C.1.i.	Date 17 + 90 days Date 37 = Commencement of Pre-Corrective Action Monitoring Program	Date 37:_____
V.C.1.i.	Date 37 + 365 days	Date 38:_____
V.C.1.ii.	Date of receipt of water level elevation data for the fourth quarter of measurements required under the Pre-Corrective Action Monitoring Program	Date 39:_____
V.C.1.ii.	Date 39 + 90	Date 40:_____
V.C.1.vi.a.	Date that the Permittee receives the analytical results from the fourth groundwater sampling event required under the Precorrective Action Monitoring Program	Date 41:_____
V.C.1.vi.a.	Date 41 + 90 days	Date 42:_____
V.C.1.vi.b.	Date that the Permittee receives the analytical results from the fourth groundwater sampling event under the PreCorrective Action Monitoring Program	Date 43:_____
V.C.1.vi.b.	Date 43 + 90 days	Date 44:_____
V.C.1.vii.	Date that the Permittee submits an evaluation of groundwater sampling data analysis results under the PreCorrective Action Monitoring Program that indicates that organics have increased in at least one well	Date 45:_____
V.C.1.vii.	Date 45 + 30 days	Date 46:_____
V.D.	**Corrective Action for Contaminated Groundwater**	
V.D.1.	Date 23, 25, or 26, whichever is applicable	Date 47:_____

V.D.1.	Date 47 + 60 days (Date 48 = Draft Groundwater Corrective Action Plan for Groundwater Extraction System, Table 3, No. 14.)	Date 48:_____
V.D.2.	Date 48 + 60 days	Date 49:_____
V.D.2.	Date of receipt of all required permits/ approvals to perform pump test/discharge to outfall (if permits/approvals denied, go to Date 52)	Date 50:_____
V.D.2.	Date 49 or Date 50, whichever is later	Date 51:_____
V.D.2.	If permits/approvals for discharge to outfall denied; date of receipt of all required permits/approvals for pumpage treatment system	Date 52:_____
V.D.2.	If permits/approvals for discharge to outfall denied; Date 14 or Date 52, whichever is later	Date 53:_____
V.D.2.	If permits/approvals for discharge to outfall denied; Date 53 + 240 days	Date 54:_____
V.D.2.	Date 51 or Date 54, whichever is applicable	Date 55:_____
V.D.5.	Date 55 + 60 days	Date 56:_____
V.D.6.	Date of the Permittee's receipt of the Director and the Administrator's approval of the draft pump test report, if approved (if report is disapproved and modified, go to Date 59)	Date 57:_____
V.D.6.	Date 57 + 30 days	Date 58:_____
V.D.6. V.J.1.i.c.	Date by which the Permittee is required to submit comments on the Director and Administrator's proposed modifications to the pump test report. Date is to be specified in the notice to the Permittee described under permit condition V.J.1.i.	Date 59:_____
V.D.6. V.J.1.ii.	If the Permittee does not submit comments on the proposed modifications as described above; Date 24 + 5 days	Date 60:_____

V.D.6. V.J.1.iii.a.	If the permittee does submit comments on the proposed modifications as described above; Effective date specified by the Director and Administrator for the modifications in the notice described under permit condition V.J.1.iii.	Date 61:_____
V.D.6.	Date 57, 60, or 61; whichever is applicable	Date 62:_____
V.D.3.	Date of the Permittee's receipt of the Director and the Administrator's approval of the draft Corrective Action Plan for a Groundwater Extraction System, if approved (if plan is disapproved and modified, go to Date 64)	Date 63:_____
V.D.3. V.J.1.i.c.	Date by which the Permittee is required to submit comments on the Director and Administrator's proposed modifications to the Corrective Action Plan for a Groundwater Extraction System. Date is to be specified in the notice to the Permittee described under permit condition V.J.1.i.	Date 64:_____
V.D.3. V.J.1.ii.	If the Permittee does not submit comments on the proposed modifications as described above; Date 24 + 5 days	Date 65:_____
V.D.3. V.J.1.iii.a.	If the permittee does submit comments on the proposed modifications as described above; Effective date specified by the Director and Administrator for the modifications in the notice described under permit condition V.J.1.iii.	Date 66:_____
V.D.3.	Date 63, 65, or 66; whichever is applicable	Date 67:_____
V.D.3.	Date 62 or Date 67, whichever is later	Date 68:_____
V.D.3.	Date 68 + 60 days	Date 69:_____
V.D.7.	Date 62 + 60 days	Date 70:_____
V.D.4.	Date of receipt of all required permits/approvals for construction of the Groundwater Extraction System based on the final Corrective Action Plan for a Groundwater Extraction System	Date 71:_____

V.D.4.	Date 71 + 60 days	Date 72:_____
V.D.8.	Date 69 + 60 days (Final Groundwater Treatment Design)	Date 73:_____
V.D.8.	Date of receipt of all required permits/ approvals for retrofitting of the Groundwater treatment system (which was installed to treat discharges from the pump test(s) required under permit condition V.D.2.), based on the design required under permit condition V.D.8., if the treatment system was constructed and if retrofitting is possible (if no system was installed or if retrofitting is not possible, go to Date 76)	Date 74:_____
V.D.8.	Date 74 + 60 days	Date 75:_____
V.D.8.	Date of receipt of all permits/ approvals required for construction of the groundwater treatment system based on the design required under permit condition V.D.8	Date 76:_____
V.D.8.	Date 76 + 240 days	Date 77:_____

V.E. **Monitoring Program and Data Evaluation For Corrective Action of Contaminated Groundwater**

V.E.1.	Date 69 + 30 days	Date 78:_____
V.E.2.	Date of the Permittee's receipt of the Director and the Administrator's approval of the draft Groundwater Corrective Action Monitoring Plan, if approved (if plan is disapproved and modified, go to Date 81)	Date 79:_____
V.E.2.	Date 79 + 30 days	Date 80:_____
V.E.2. V.J.1.i.c.	Date by which the Permittee is required to submit comments on the Director and Administrator's proposed modifications to the Groundwater Corrective Action Monitoring Plan. Date is to be specified in the notice to the Permittee described under permit condition V.J.1.i.	Date 81:_____
V.E.2.	If the Permittee does not submit	Date 82:_____

V.J.1.ii.	comments on the proposed modifications as described above; Date 81 + 5 days	
V.E.2. V.J.1.iii.a.	If the permittee does submit comments on the proposed modifications as described above; Effective date specified by the Director and Administrator for the modifications in the notice described under permit condition V.J.1.iii.	Date 83:_____
V.E.3.	**Date of completion of installation and implementation of the final Groundwater Corrective Action Monitoring Plan**	**Date 84:**_____
V.D.9.	Date 75 or Date 77; whichever is applicable	Date 85:_____
V.D.	**Corrective Action for Contaminated Groundwater**	
V.D.9.	Date 72 or Date 85, whichever is later	Date 86:_____
V.D.9.	Date 86 + 60 days	Date 87:_____
V.D.9.	Date 84 + 90 days	Date 88:_____
V.D.9.	Date 87 or Date 88; whichever is later (GW extraction and treatment systems operational)	Date 89:_____
V.E.	**Monitoring Program and Data Evaluation For Corrective Action of Contaminated Groundwater**	
V.E.4.	Date the Permittee obtains the last water level elevation measurements required for the first year as specified in the approved Groundwater Corrective Action Monitoring Plan	Date 90:_____
V.E.4.	Date 90 + 90 days	Date 91:_____
V.F.	**Meeting the Clean-Up Standards**	
V.F.1.	Date 89 + 365 days	Date 92:_____

V.F.2.	Date the Permittee determines that the Clean-Up Standards on Table 8 of the OCC permit have been met for all parameters at all monitoring points under the approved Groundwater Corrective Action Monitoring Program for a year's monitoring period	Date 93:_____
V.F.2.	Date 93 + 30 days	Date 94:_____
V.F.2.v.d.4.	Date the Permittee determines that any of the monitoring points in the Approved Groundwater Corrective Action Monitoring Plan exceed the Clean-Up Standards of the OCC permit during the three year period following cessation of operation of the groundwater extraction and treatment systems	Date 95:_____
V.F.2.v.d.4.	Date the Permittee received the quality assured analytical data upon which the determination described above was based	Date 96:_____
V.F.2.v.d.4.	Date 96 + 30 days	Date 97:_____
V.F.2.v.d.4.	Date 96 + 90 days	Date 98:_____
V.F.3.	If submitted at any time during the term of the OCC permit:	
	Date the Permittee submits a demonstration supporting the position that there are no local uses of groundwater, which have been or are likely to be, adversely impacted from the releases from the facility for drinking water purposes	Date 99:_____
V.F.3.	Effective date specified in the Director and the Administrator's approval of the demonstration (if disapproved and modified, go to Date 101)	Date 100:_____
V.F.3. V.J.1.i.c.	Date by which the Permittee is required to submit comments on the Director and Administrator's proposed modifications to the demonstration. Date is to be specified in the notice to the Permittee described under permit condition V.J.1.i.	Date 101:_____

V.F.3. V.J.1.ii.	If the Permittee does not submit comments on the proposed modifications as described above; Date 101 + 5 days	Date 102:_____
V.F.3. V.J.1.iii.a.	If the permittee does submit comments on the proposed modifications as described above; Effective date specified by the Director and Administrator for the modifications in the notice described under permit condition V.J.1.iii.	Date 103:_____
V.G.	**Corrective Action for Contaminated Groundwater Program Closure**	
V.G.	Date 79, 82, or 83; whichever is applicable	Date 104:_____
V.G.	Date 67 or 104, whichever is later	Date 105:_____
V.G.	Date 105 + 90 days	Date 106:_____
V.H.	**Corrective Action for Contaminated Groundwater Program Cost Estimate**	
V.H.1.	Date 105 + 30 days	Date 107:_____
V.H.2.	Date of the Director and Administrator's approval of the closure plan submitted by the Permittee as required under permit condition V.G.	Date 108:_____
V.H.2.	Date 108 + 30 days	Date 109:_____
V.H.5.	Date of approval of any modification of the Corrective Action for Contaminated Groundwater Program	Date 110:_____
V.H.5.	Date 110 + 30 days	Date 111:_____
V.I.	**Corrective Action for Contaminated Groundwater Program Financial Assurance**	
V.I.	Date the Permittee first submitted the estimate of capitol, operating, and monitoring costs for the Corrective Action for Contaminated Groundwater Program	Date 112:_____
V.I.	Date 112 + 60 days	Date 113:_____

V.I.	Date the Permittee first submitted the estimate of costs for implementing the closure plan for the Corrective Action for Contaminated Groundwater Program	Date 114:_____
V.I.	Date 114 + 60 days	Date 115:_____

PART I: GENERAL FACILITY INFORMATION

Facility Name: Occidental Chemical Corporation
EPA I.D. No.: WAD009232314

PART B PERMIT INSPECTION CHECKLIST FOR:

Name:	Occidental Chemical Corporation (OCC) Industrial and Specialty Chemicals Tacoma Plant
City/State:	Tacoma, Washington
Street Address:	605 Alexander Avenue Tacoma, Washington 98421
Mailing Address:	P.O. Box 2157 Tacoma, Washington 98401
Facility Contact: Position: Phone Number:	Harry E. Schmidt Plant Manager (206) 383-2661
Size of Facility:	33 Acres (approx.)
Physical Dimensions:	1,500 feet by 900 feet (approx.)
Nominal Elevation of Plant:	+11 to 12 feet (National Geodetic Vertical Datum of 1929)
Date Facility Began Operation:	February 1929
Latitude and Longitude: (degrees, minutes, (seconds):	47/16/50 North, 122/24/10 West

The general location of the facility is illustrated in Exhibits 1 and 2 on the following pages (Figures 1-1 and 1-2 of Attachment 1 of the OCC RCRA permit).

General Facility Description:

The plant is known as a chlor-alkali facility and uses salt, electricity, and water as the main raw materials to produce the following inorganic chemicals:

- Caustic Soda (Sodium Hydroxide, NaOH)
- Liquefied Chlorine (Cl_2)
- Sodium Hypochlorite Bleach (NaOCl)
- Muriatic Acid (Hydrochloric Acid, HCl)
- Ammonia (Anhydrous Ammonia, NH_3)
- Ammonium Hydroxide (Aqua Ammonia, NH_4OH)
- Calcium Chloride ($CaCl_2$)

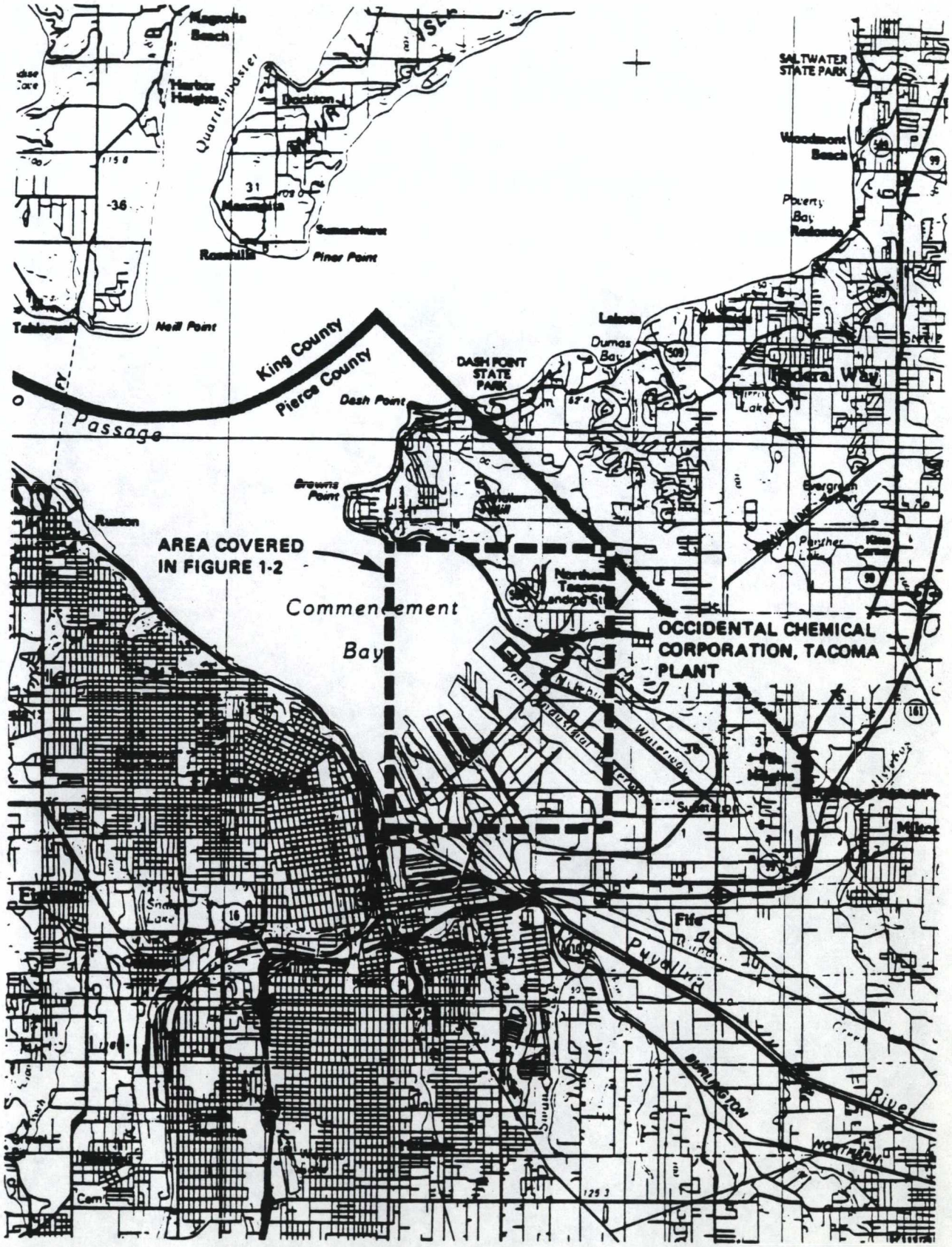
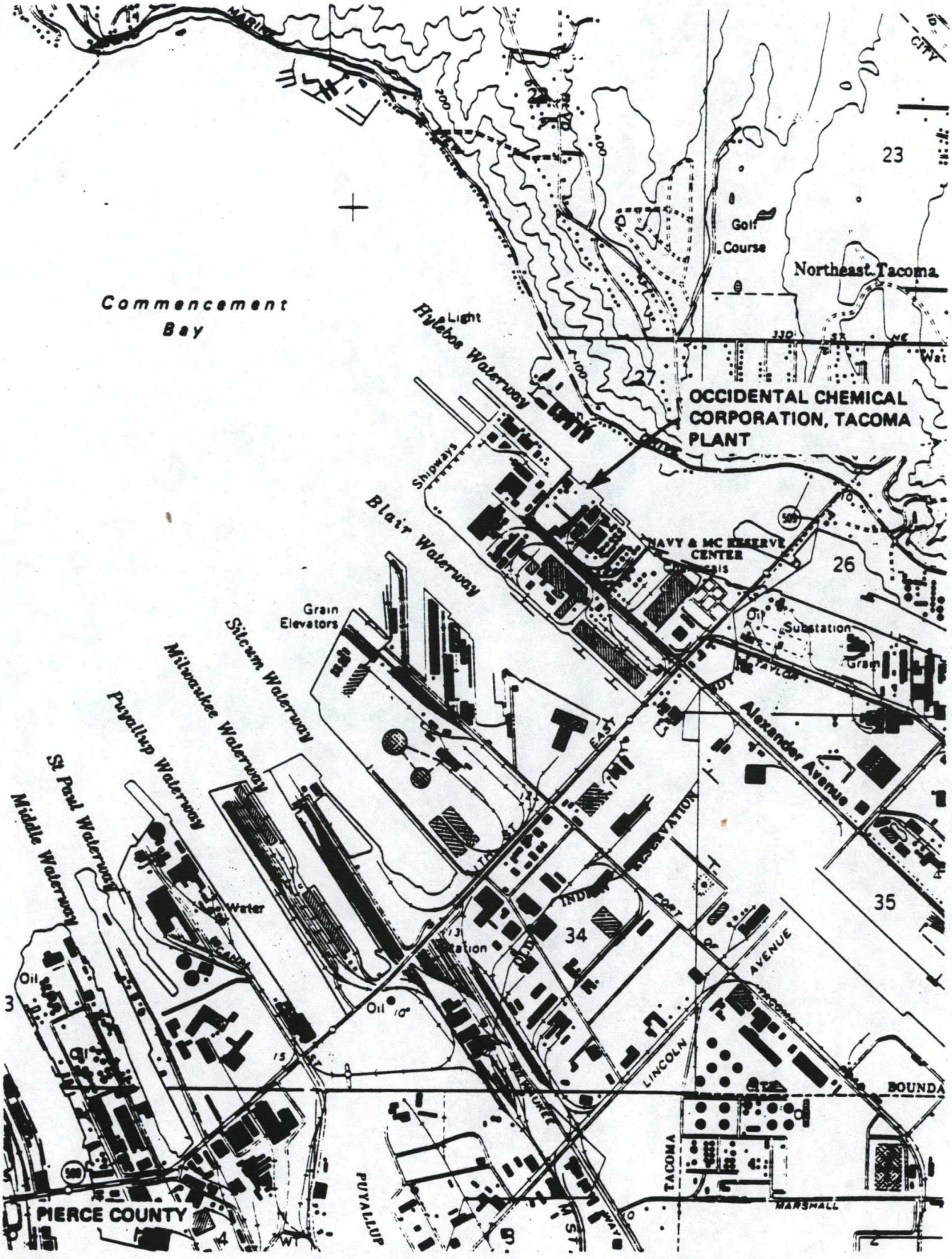


FIGURE 1-1
TACOMA VICINITY MAP
Occidental Chemical Corporation
Tacoma, WA

Exhibit 1: Tacoma Vicinity Map



Source: USGS
Tacoma Quadrangle
Washington
1:100 000-Scale Series
(Topographic) 1975

NORTH

0 1000 2000 3000
SCALE IN FEET

FIGURE 1-2
PORT OF TACOMA
VICINITY MAP
Occidental Chemical Corporation
Tacoma, WA

Exhibit 2: Port of Tacoma Vicinity Map

During these plant processes, several wastes are produced. Wastes that are regulated under EPA and WADOE hazardous waste regulations are listed on Exhibit 3 of this checklist, found on the following page (Table 8-1 of Attachment 7 of the OCC permit).

All of the wastes which OCC is permitted to manage under RCRA originate directly or indirectly from the S-3 cell line in which graphite anode electrolytic cells are used. Wastes numbered 1 through 4 on Exhibit 3 originate from the chlorine purification step of the process. Waste number 5 originates from the demolition of the graphite anodes during routine cell replacement. Waste number 6 can be generated during loading or transfer operations of wastes 1 through 4.

In 1985, OCC installed new acid demisters that have essentially eliminated the carry-over of sulfuric acid into the chlorine purification column reboilers. This equipment has greatly simplified OCC's waste management practice in that wastes numbered 1 through 3 are no longer being generated, thus eliminating the decanting process that was occurring naturally in the railcar containers. The OCC permit includes wastes 1 and 3 because quantities continued to be stored on-site at the time of permit issuance. This installation of the acid demisters did not appreciably alter the composition of the chlorinated hydrocarbon portion of the waste stream, nor has it had any influence on the method of on-site storage of this waste.

(References: Attachment 2 p. 4-3, 4-10, 4-11 and Attachment 7 p. 8-5, 8-6 of OCC permit.)

Table 8-1
RCRA AND WDOE HAZARDOUS WASTES GENERATED AT OCCIDENTAL CHEMICAL CORPORATION'S TACOMA PLANT

Waste	EPA Waste Code	WDOE Designation	Stored Longer Than 90 Days[a]
*1. Chlorinated hydrocarbons/sulfuric acid mixture[b]	KO73, D002	DW	Yes
*2. Decanted chlorinated hydrocarbons[b]	KO73	DW	Yes
*3. Decanted sulfuric acid[b]	D002, KO73	DW	Yes
*4. Chlorinated hydrocarbons[c]	KO73	DW	Yes
*4(a) Solid residues from closure and/or spill cleanup of Waste No. 4	KO73	DW	Yes
*5. Spent graphite electrode blades and butts, mastic, and dross	D008	DW	Waste pile storage
*6. Contaminated clothing	KO73	DW	Yes
7. Laboratory chemicals	(See Table 3-9)	DW/EHW	No
8. Washings from cleaning chlorinated hydrocarbon railcars	KO73	DW	No
8(a) Same as Waste No. 8, but contains less than 1,000 ppm chlorinated hydrocarbons	KO73	DW	No[d]
9. Waste asbestos	D008	DW	No[d]
10. Spent 1,1,1-trichloroethane	F002, D008	DW	No
11. Brine filter cake	Not regulated	DW[e]	No[d]
12. Calcium chloride filter cake	Not regulated	DW[e]	No[d]
13. Corrosive soils	D002	DW	No[d]
14. Corrosive insulation	D002	DW	No[d]
15. Boiler tube ash	D002	DW	No[d]
16. Electrostatic precipitator filter media	D008	DW	No[d]
17. Water from electrostatic precipitator	N/A[f]	N/A[f]	No
18. Solvent-contaminated soils	F002	DW/EHW	No
19. Process piping and equipment	Not regulated	DW/EHW	No
19(a) Same as Waste No. 19, but waste is in D.O.T.-approved containers	Not regulated	DW/EHW	No[d]
20. Lead-contaminated soils	D008	DW/EHW	No[d]
21. Transformer oil (2 to 50 ppm PCB)	Not regulated	DW	No
22. H-4 anode blanket	Not regulated	DW	No[d]
23. Mercury (Hg) contaminated residues and equipment	D009	DW/EHW	No
24. Potentially hazardous wastes resulting from emergency conditions	Case-by-case determination	Case-by-case determination	No[d]
25. Container (drum) storage area sump and catch basin waters	Case-by-case determination	Case-by-case determination	No[d]

[a] Wastes stored onsite for less than 90 days are provided for information only. OCC is not seeking a RCRA permit for the management of these wastes. These wastes are managed in accordance with 40 CFR Part 262 and WAC 173-303-170.

[b] Waste No. 1 is composed of a mixture of wastes No. 2 and No. 3. Waste No. 1 is currently onsite, but no longer being generated. See Waste No. 4.

[c] Waste No. 4 is currently being generated in chlorine purification column reboilers. This waste is substantially equivalent to Waste No. 2. Sulfuric acid (Waste No. 3) carryover into the reboilers is no longer occurring from acid demisters.

[d] Based on waste compatability information, these wastes, although stored onsite for less than 90 days may be stored in the container (drum) storage area for which OCC is seeking a RCRA permit. Emergencies involving the storage of these wastes in the container (drum) storage area are addressed in this Contingency Plan. Emergencies involving the generation or transport of these wastes to the container (drum) storage area are <u>not</u> addressed in this Contingency Plan.

[e] These wastes could receive a WDOE DW designation if NaCl or CaCl content exceeds 10 percent.

[f] This waste has never been generated.

*Denotes wastes for which OCC is seeking a RCRA permit.

Exhibit 3: RCRA and WADOE Hazardous Waste Generated at OCC's Tacoma Plant

Facility Name: Occidental Chemical Corporation
EPA I.D. No.: WAD009232314

Units at the facility:

Container (Drum) Storage Unit Area: Cell A (east bay)

Cell B (west bay)

Railcar Container Storage Areas: TC-1
TC-2
TC-3

(Railcar Storage Units identified as HOKX-2036 and HOKX-2049 may be located at any one of these locations.)

Graphite Waste Pile

The locations and layouts of the dangerous waste management units listed above are illustrated on Exhibits 4, 5, and 6 of this checklist, found on the following pages (Attachment 3, Figure 5-6; Attachment 7, Figure 8-8; and Figure 1 of the OCC permit).

Wastes that OCC is permitted to manage at the facility in each unit are listed below in bold type:

UNITS	WASTE CODE	WASTE NUMBER FROM EXHIBIT 3*
Railcar Containers	**D002, K073**	**1, 2, 3, 4, 8, 8a**
Graphite Waste Pile	**D008**	**5**
Container (Drum) Storage Area	**D002, D008, K073**	**4a, 5, 6,** 8a, 9, 11, 12, 13, 14, 15, 16, 19a, 20, 22, 24, 25

** Wastes not shown in bold are stored in the container (drum) storage area for less than 90 days under the generator accumulation provisions of 40 CFR 262.34 and WAC 173-303-170, rather than the facility permit provisions. These wastes are shipped off-site for storage, treatment, and/or disposal.

OCC IS PERMITTED TO TREAT DANGEROUS WASTES IN CONTAINERS UNDER THE PROVISIONS OF WAC 173-303-400 UNTIL FINAL STANDARDS ARE ADOPTED BY THE DEPARTMENT FOR TREATMENT IN CONTAINERS AND A FINAL PERMIT DETERMINATION PURSUANT TO THESE STANDARDS IS MADE.

OCC IS NOT PERMITTED TO ACCEPT ANY DANGEROUS WASTES FROM OFF-SITE GENERATORS OR FACILITIES.

Figure 1

PROTECTIVE EQUIPMENT

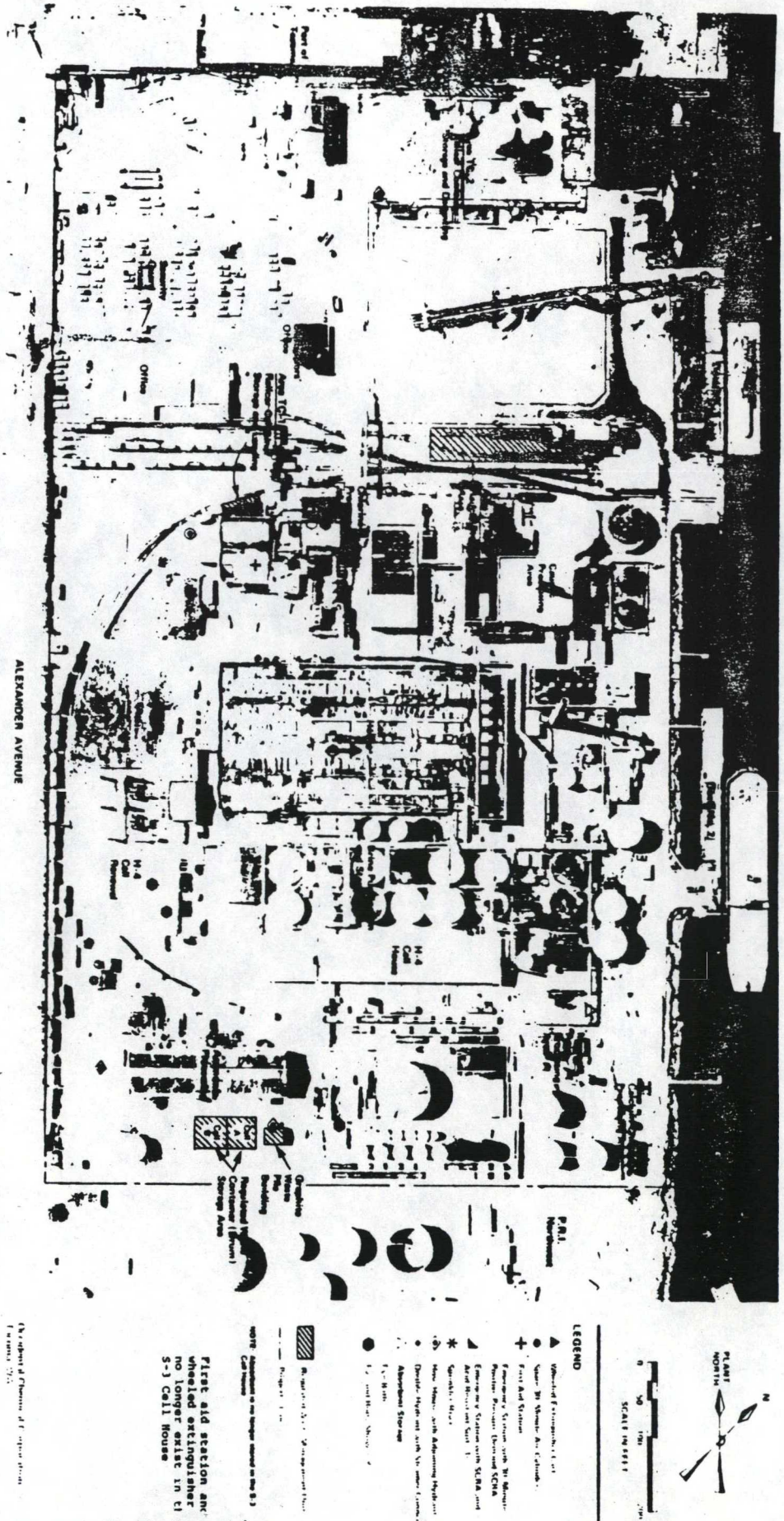


Exhibit 4: Waste Management Unit Locations

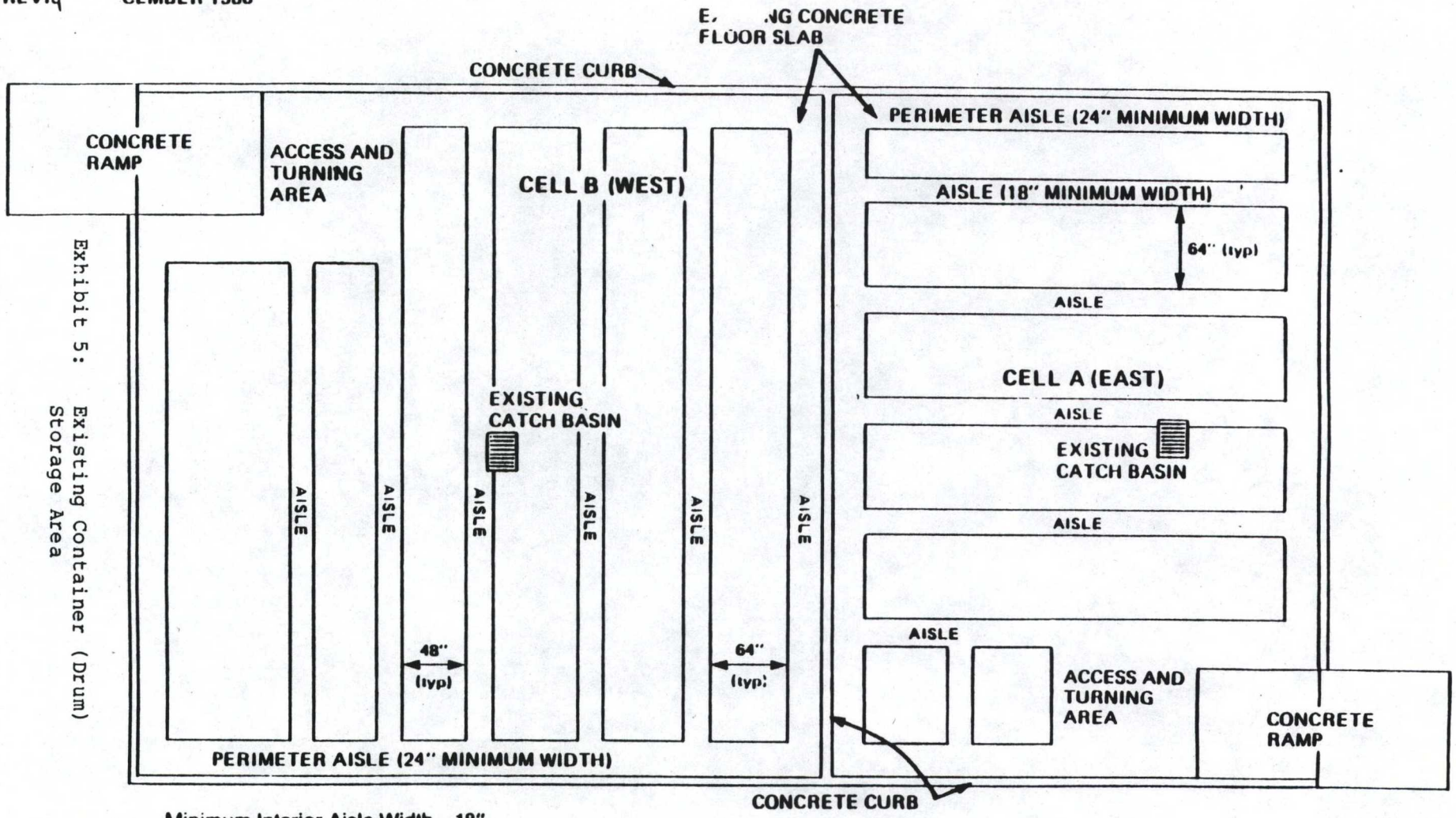


Exhibit 5: Existing Container (Drum) Storage Area

Minimum Interior Aisle Width - 18"

Minimum Perimeter Aisle Width - 24"

Nominal Pallet Sizes

4 Drum Capacity - 48" × 48"

2 Drum Capacity - 48" × 32"

Note: This figure is for illustrative purposes only. Actual aisle locations (but not minimum specified aisle widths) may deviate from that shown.

Plant North

0 5 10

Feet

FIGURE 8-8
EXISTING CONTAINER (DRUM) STORAGE AREA
AISLE SPACING DIAGRAM
Occidental Chemical Corporation
Tacoma, WA

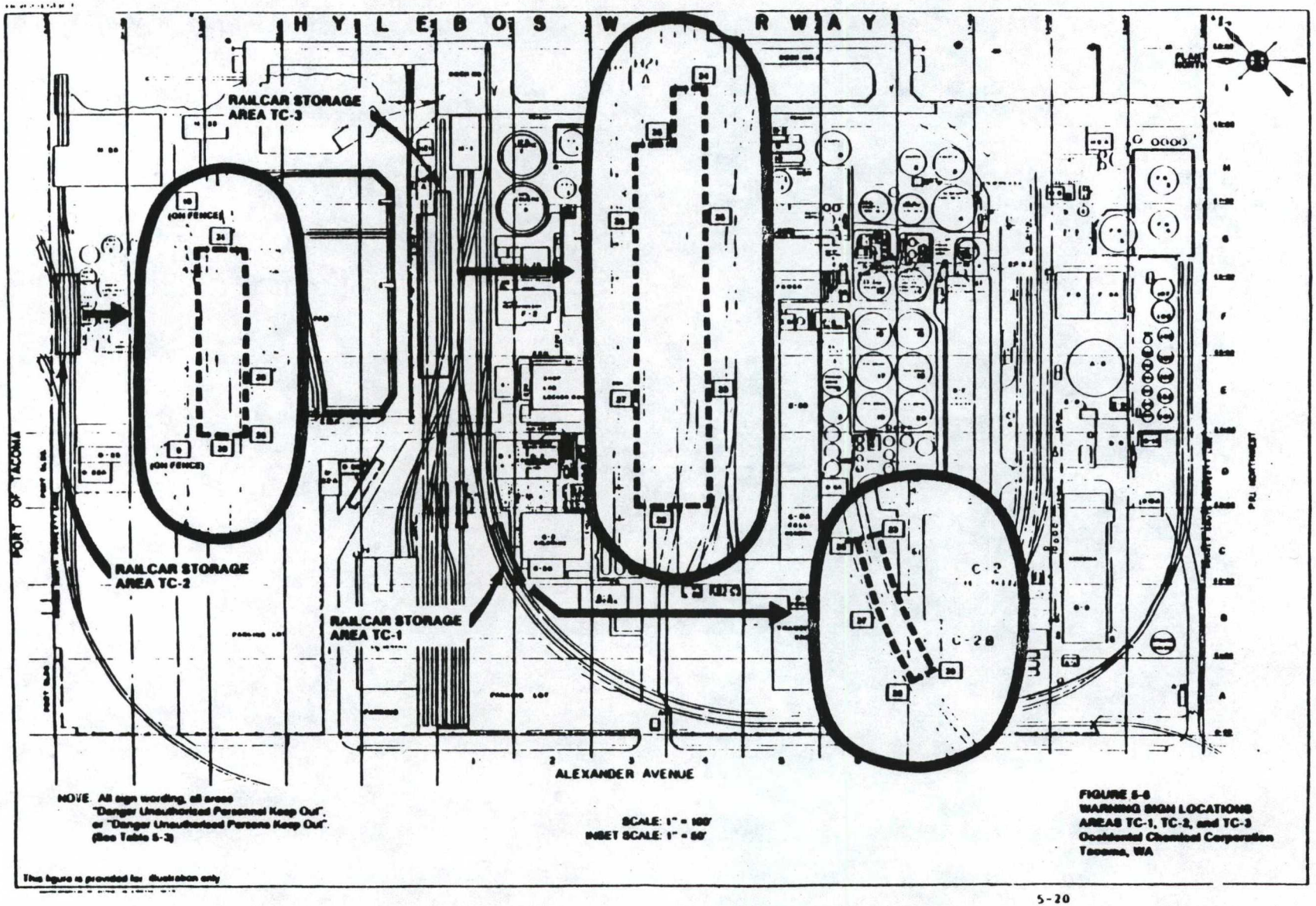


Exhibit 6: Areas TC-1, TC-2, TC-3

PART II: EPA/WADOE OFFICE INSPECTION

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
I.G.	1.	Have all reports, applications, or information submitted by the Permittee been signed and certified in accordance with WAC 173-303-810(15) or 40 CFR Part 2 and §270.11 for HSWA provisions?				
II.I.1.ii. 264.73(b)(9) WAC 173-303-801(12)	2.	Has the Permittee submitted, by March 31 of each year, a certification that the Permittee has a program in place to reduce the volume and toxicity of dangerous waste that he/she generates to the degree determined practicable? Does the certification also state that the proposed method of treatment, storage, or disposal is the most practicable method currently available to the Permittee to minimize the present and future threat to human health and the environment? Date of most recent submittal: _____				
II.I.1.iii. WAC 173-303-390(2)	3.	<u>Annual Reports</u> a. Has the Permittee prepared and submitted to the Director annual reports covering facility activities by March 1 of each year (starting with March 1, 1989) using the TSD Facility Annual Dangerous Waste Report - Form 5? List below any years for which annual reports were <u>not</u> submitted: _____ _____ _____ _____ b. As a spot check, select the most recent annual report and review to determine whether the following required information is provided: i. EPA state identification number, facility name, and address? ii. Calendar year covered by the report? iii. The method of treatment, storage, and/or disposal for each hazardous waste? iv. The most recent closure and post-closure cost estimates? i. Certification signed by the owner and operator or authorized representative?				

* INR = Information Not Reviewed
**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
I.F.4.	4.	The permit is scheduled for review no later than November 16, 1993, unless the waste pile unit is fully closed and certified prior to that date. If applicable, has the permit been reviewed?				
I.F.3. §270.10(h)	5.	The permit is scheduled to expire November 16, 1998. If applicable, has a new permit application been submitted by May 20, 1998?				
I.F.11.	6.	If any physical alterations or additions have been made to the permitted facility, did the Permittee give notice to the Director and Administrator as soon as possible?				
I.F.12.	7.	If the Permittee has commenced storage in a portion of a dangerous waste management unit which has been modified since permit issuance:				
I.F.12.i.		a. Did the Permittee submit to the Director a letter signed by the Permittee and a registered professional engineer stating that the unit was constructed or modified in compliance with the permit?				
I.F.12.iii.		b. Within 15 days of the date of submission of the letter described in 5a, did the Director send written notice of his or her intent to inspect the modified unit? (If notice was not sent within time specified, the Director waives his/her inspection rights.)+				
I.F.12.ii.		c. If notice was sent and the Director inspected the modified unit, did he or she notify the Permittee in writing that he or she finds the unit is in compliance with the conditions of the permit?				
I.F.16.	8.	If the Permittee reported verbally to the Director and the Administrator any noncompliance with the permit which might have endangered health or the environment: a. Was the Director notified immediately as soon as the Permittee became aware of the noncompliance? b. Was the Administrator notified within 24 hours of the time the Permittee became aware of the noncompliance?				

+Signifies that this item does not indicate compliance or noncompliance but is included only for information purposes.

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**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
I.F.16. (cont'd)	8.	c. Did the verbal notification include the following:				
I.F.16.i.		i. Information on releases that may have endangered drinking water supplies?				
I.F.16.ii.		ii. Information on releases, fires, or explosions that could threaten the environment or human health outside the facility?				
I.F.16.ii.a.		iii. Name, address, and telephone number of owner or operator?				
I.F.16.ii.b.		iv. Name, address, and telephone number of facility?				
I.F.16.ii.c.		v. Date, time, and type of incident?				
I.F.16.ii.d.		vi. Shipping name, hazard class, nature, and quantity of materials involved?				
I.F.16.ii.e.		vii. The extent of injuries, if any?				
I.F.16.ii.f.		viii. Assessment of actual or potential hazard to health or the environment?				
I.F.16.ii.g.		ix. Estimated quantity and disposition of recovered material from incident?				
I.F.17.		d. Was a written report submitted to the Director/Administrator within 5 (five) calendar days of the time the Permittee became aware of the noncompliance?				
I.F.17.		e. Did the written report include the following:				
		i. Description of noncompliance and cause?				
		ii. Description of the period of noncompliance?				
		iii. Anticipated time of continued noncompliance, if not corrected?				
		iv. Corrective measures being undertaken?				
		v. Steps taken or planned to reduce, eliminate, and prevent reoccurrence?				
I.F.13.	9.	If any change in the permitted facility or activity which might have resulted in noncompliance with permit requirements was planned, did the Permittee give advance notice to the Director or Administrator?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.H.1. ATT. 7	10.	Contingency Plan				
ATT. 7 p. 8-8		a. Has the Permittee submitted a copy of the contingency plan to the Washington State DOE Southwest Regional Office?				
ATT. 7 p. 8-60		b. If the contingency plan was implemented since the last inspection, did the Permittee submit a written report to the EPA Regional Administrator/Washington DOE within 15 days of the incident?				
II.H.2.vii. ATT. 7 p. 8-(60-61)		c. If the contingency plan was implemented since the last inspection and the Permittee submitted a written report, did the report contain the following:				
		i. Name, address, and telephone number of the owner/operator?				
		ii. Name, address, and telephone number of the facility?				
		iii. Date, time, in-plant location, and type of incident?				
		iv. Name and quantity of material involved?				
		v. Extent of the resultant injuries?				
		vi. Assessment of the actual or potential hazards to human health or the environment?				
		vii. Estimated quantity and disposition of material cleaned up following the incident?				
		viii. Any other information, as appropriate?				
		ix. Cause of the accident?				
		x. Corrective action taken to prevent recurrence?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE OFFICE

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.C.	11.	Waste Analysis Plan				
III.B.1.		a. The Permittee stores the following wastes in the units identified below. Waste numbers correspond to numbers used in Exhibit 3.				
		Railcar Containers:				
		1. Chlorinated Hydrocarbons/ Sulfuric acid mixture — K073, D002				
		2. Decanted Chlorinated Hydrocarbons — K073				
		3. Decanted Sulfuric Acid — D002, K073				
		4. Chlorinated Hydrocarbons — K073				
		Drum Storage Unit				
		4a. Solid Residues from Closure and/or Spill Cleanup of Waste No. 4 above — K073				
		5. Spent Graphite Electrode Blades and Butts, Mastic, and Dross — D008				
		6. Contaminated Clothing — K073				
		Graphite Waste Pile Building				
		5. Spent Graphite Electrode Blades and Butts, Mastic, and Dross — D008				
I.F.10.iv.		b. If the records indicate that the Permittee has substituted analytical method(s) for those specifically approved for use in the permit, did the Permittee submit a request for substitution to the Director/Administrator? (See inspection item 11., facility office inspection, Sections I and II, for a list of approved methods.)				
I.F.10.iv.		c. If a request for substitution as described above was submitted, did the request include information demonstrating that the proposed method(s) is (are) equal or superior to the analytical method(s) requested to be substituted in terms of sensitivity, accuracy, and precision (i.e., reproducibility)?				
I.F.10.iv.		d. If the records indicate that the Permittee has substituted analytical method(s) for those specifically approved for use in the permit and a request for substitution was submitted, did the Director/Administrator notify the Permittee that the substitution was approved?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE OFFICE

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.J.	12.	Closure Each of the regulated units is anticipated to be closed over the period of the OCC permit. Estimated dates for closure of the units are as follows: Unit — Estimated Latest Date of Closure Railcar Container Storage Area TC-3 — 1989 Railcar Container Storage Area TC-1 — 1989 Railcar Container Storage Area TC-2 — 1991 Drum Storage Area — 1991 Waste Pile — 1989 a. Have any RCRA units been closed at the facility since November 16, 1988?**				
II.J.1. ATT.8. WAC 173-303-610(2)		b. If yes, do the records indicate that closure was completed in accordance with the Closure Plan?				
II.J.4. ATT.8.		i. Did the Permittee notify the Department at least 60 calendar days prior to the start of closure of the waste pile and at least 45 calendar days prior to the start of closure of the container storage areas?				
II.J.5. ATT.8. p.4-10,61,62		ii. Did the Permittee close all dangerous waste management units within the time limits specified in the Closure Plan?				
II.J.5. ATT.8. p.10		iii. Did the Permittee complete closure activities in accordance with the schedule specified in the Closure Plan after receiving the final volume of dangerous waste?				
II.J.7. ATT.8. WAC 173-303-610(6)		iv. Has the Permittee certified that each dangerous waste management unit was closed in accordance with the applicable specifications in the Closure Plan?				
II.J.2.		v. Did the Permittee submit the certification statements by registered mail to the Director within 60 calendar days after completion of closure of the waste pile and within 60 calendar days of the completion of final facility closure?				
II.J.2.		vi. In the closure certifications, did the Permittee describe any minor deviations from the permitted closure procedures?				
II.J.3. WAC 173-303-610(3) and -830(3) & (4)		c. Do the records indicate that any changes have occurred at the facility which required a change in the Closure Plan including: - operating plans? - facility designs? - expected year of closure?+				

+ Signifies that this item does not indicate compliance or noncompliance but is included only for information purposes.

*INR = Information Not Reviewed

**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE OFFICE

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.J. (cont'd)	12.	Closure				
II.J.3. WAC 173-303-610(3) and -830 (3) & (4)		d. Do the records show that the Permittee amended the Closure Plan whenever necessary?				
II.J.8.		e. During closure of a dangerous waste management unit, if contamination was detected that the Permittee believed was due to a release from another solid waste management unit, did the Permittee submit a formal request to the Director (within 60 calendar days after receipt of supporting data) to:				
II.J.8.i.		i. Evaluate the extent, character, magnitude, and impact on health or the environment posed by the release?				
II.J.8.ii		ii. Address corrective action for the release?				
II.J.9. WAC 173-303-830(3) §270.41		f. Did the Permittee submit the request as a permit modification?				
II.J.9.		g. Was the following documentation submitted by the Permittee to the Director and the Administrator with the request:				
II.J.9.i.		i. A report, including a detailed analysis and summary of all applicable data collected during the closure operations, and raw data and supporting calculations to demonstrate that:				
II.J.9.i.a.		- The level of constituents found in the soil is much greater than ever present in the waste stored in the dangerous waste management unit, and is not reasonably attributable to a concentration of constituents in the soil over time;				
II.J.9.i.b.		- The pattern of the constituents in the soil is distinctly dissimilar to hazardous constituents present in the dangerous waste management unit's storage operation, including loading and unloading;				
II.J.9.i.c.		- Hazardous constituents in the soil do not match the fingerprint of the waste managed at the dangerous waste management unit; or,				
II.J.9.i.d.		- The constituents in the soil are not solely attributable to the dangerous waste management unit.				
II.J.10.		h. Do the records show that the Permittee completed the portions of the Closure Plan not affected by the release discussed in Item d?				

*INR = Information Not Reviewed
**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE OFFICE

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.O. WAC 173-303-620(9)	13.	Incapacity of Owners or Operators, Guarantors, or Financial Institutions a. Have proceedings under Title 11 U.S. Code (Bankruptcy) commenced which name any of the following as debtor: Permittee, guarantor or Permittee's corporate guarantee, or the trustee or financial institution which has issued the Permittee's certificate of liability insurance?+ b. If yes, did the Permittee notify the Department by certified mail of the commencement of a voluntary or involuntary proceedings under Title 11 (Bankruptcy) U.S. Code, naming the Permittee as debtor, within 10 days after commencement of the proceedings?				

+ Signifies that this item does not indicate compliance or noncompliance but is included only for informational purposes.

*INR = Information Not Reviewed
**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE OFFICE

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.A.		RCRA Facility Investigation I (hereafter called RFI-I) (Excludes Investigation in the Hylebos Waterway)				
V.A.1.i. Figure 2	1.	If after Date 2: Do the records document that six new wells were installed and developed as close as practicable to the locations designated on Exhibit 8?				
V.A.1.i. Table 4	2.	If after Date 2: Have the six new wells in item 1 above been designated as follows: a. 31-25? b. 31-50? c. 32-25? d. 32-50? e. 33-25? f. 33-50?				
V.A.1.i. V.A.2.ii. ATT. 11 p.1	3.	If after the dates indicated below: Have as-built drawings, descriptions of the geologic strata encountered, and the well logs maintained by a qualified geologist been submitted to EPA and/or Ecology for the indicated wells? i. **Date 5** – Well 31-25? ii. **Date 7** – Well 31-50? iii. **Date 9** – Well 32-25? iv. **Date 11** – Well 32-50? v. **Date 13** – Well 33-25? vi. **Date 15** – Well 33-50?				
V.A.1.i. V.A.2.ii. ATT. 11 p.1	4.	If after Date 5, 7, 9, 11, 13, or 15: Do the logs and descriptions submitted as discussed in inspection item 3 contain the following: (As a spot check, select two reports and check for the items listed below.) a. Date and time of construction? b. Drilling method and indication of fluid used? c. Well location (surveyed to within 0.5 feet)? d. Borehole diameter and well casing diameter? e. Well depth (to within 0.1 feet)? f. Drilling logs and lithologic logs: including a description of soil or rock types, color, petrology, weathering, texture, structure, and fractures? g. Casing materials? h. Screen design, including screen length, material used, and slot size? i. Casing and screen joint type? j. Filter pack material, including size and placement method, and approximate volume? k. Composition and approximate volume of sealant material and method of placement? l. Surface seal design and construction? m. Well development procedures? n. Ground surface elevation (to within 0.01 feet)? o. Top of casing elevation (to within 0.01 feet)? p. Detailed drawing of well, including dimensions?				

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**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.A.3.	5.	<u>If after Date 21</u>: Has the Permittee submitted a draft report on the completed RFI-I to the Director and the Administrator?				
V.A.3.i. V.A.1.iii. V.A.1.vi. V.A.1.vii. V.A.1.viii. Table 5	6.	<u>If after Date 21</u>: If the Permittee has submitted the draft report on the RFI-I, does the report include the following: a. Analyses of all uncomposited samples obtained from each of the monitoring wells listed below for all of the parameters listed on Exhibit 7? <u>Well Numbers</u> 1-25 _____ 1-45 _____ 1-100 _____ 1-175 _____ 2-25 _____ 2-50 _____ 2-100 _____ 2-166 _____ 3-25 _____ 3-50 _____ 3-100 _____ 3-175 _____ 4-25 _____ 4-45 _____ 4-83 _____ 4-115 _____ 4-175 _____ 5-15 _____ 5-25 _____ 5-50 _____ 5-100 _____ 6A-24.5 _____ 6A-50 _____ 6A-100 _____ 7-25 _____ 7-50B _____ 7-100 _____ 7-181 _____ 8-23 _____ 8-54 _____ 8-99 _____ 9-25 _____ 9-50 _____ 9-100 _____ 10-24 _____ 10-45 _____ 10-50 _____ 10-100 _____ 11-45 _____ 11-183 _____ 12-45 _____ 12-160 _____ 13-25 _____ 13-49 _____ 14-25 _____ 14-50 _____ 15-25 _____ 15-50 _____ 16-25 _____ 16-50 _____ 17-24 _____ 17-50 _____ 18-25 _____ 18-50 _____ 19-25 _____ 19-50 _____ 20-25 _____ 20-50 _____ 21-25 _____ 21-48 _____ 22-25 _____ 22-50 _____ 23-25 _____ 23-50 _____ 24-35 _____ 24-50 _____ 25-25 _____ 25-50 _____ 26-25 _____ 26-50 _____ 27-25 _____ 27-50 _____ 28-15 _____ 29-14 _____ 30-15 _____ 31-25 _____ 31-50 _____ 32-25 _____ 32-50 _____ 33-25 _____ 33-50 _____				
V.A.1.iv. V.A.1.vi. Table 5		b. Analyses of all samples obtained from each of the surface runoff locations listed below, for all of the parameters listed on Exhibit 7: i. SS-1? ii. SS-2? iii. SS-3? iv. SS-4? v. SS-5? vi. SS-6?				
V.A.1.v. V.A.1.vi. Table 5		c. Analyses of all samples obtained from each of the seep monitoring points listed below, for all of the parameters listed on Exhibit 7:				
V.A.1.ii.a.		i. Seep No. 1 at facility's north dock area between old site of solvent plant and the Hylebos Waterway?				

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Table 6

SPECIFIC PARAMETER LIST

Methylene Chloride
1,2-Trans-dichloroethylene
Trichloroethylene
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Carbon Tetrachloride
1,1-Dichloroethylene
Chloroform
1,1,2-Trichloroethane
Vinyl Chloride

Exhibit 7: Specific Parameter List

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.A.3.i. (cont'd)	6.					
V.A.1.ii.b.		ii. Seep No. 2 just north of Seep No. 1?				
V.A.1.ii.c.		iii. Seep No. 3 at facility's south dock area?				
V.A.1.vii.		d. Analyses of the sample from well No. 2-50 for the parameter pyridine in accordance with the procedures designated in Appendix A of the permit (which is included as Attachment 1 of this checklist)?				
V.A.1.viii.		e. Analyses of the samples from Well Nos. 33-25 and 33-50 for the parameter polychlorinated biphenyls in accordance with the procedures designated in Appendix A of the permit (which is included as Attachment 1 of this checklist)?				
V.A.3.ii.		f. Finalization of the evaluation of the laboratory and bench scale alternate groundwater treatment methods described in Attachment 14 of the permit?				
V.A.3.ii. Table 11		g. A selection of one of the methods evaluated as described above. The method selected must be one of the following methods: (1) steam stripping, (2) air stripping followed by vapor-phase carbon absorption, or (3) water-phase carbon absorption?				
V.A.3.iii.		h. A revised version of Figure 2 of the permit (which is included as Exhibit 8) to reflect the final locations of the new wells and the seep monitoring points established pursuant to permit conditions V.A.1.i. and V.A.1.ii., respectively. (This revision shall not require a permit modification). Note 1: Locations for monitoring wells and surface run-off sampling points as required by permit conditions V.A.1.i. and V.A.1.ii. are illustrated on Figure 2 of the permit (which is included as Exhibit 8). Locations for seep monitoring points should have been marked by the Permittee under the requirements of and as described in permit condition V.A.1.ii.				
V.A.4.	7.	<u>If the Administrative and the Director approved the draft report of the completed RFI-I: and</u> <u>If after Date 23</u>: Has the Permittee submitted to the Director and the Administrator a final report on the RFI-I?				
V.A.4. V.J.	8.	<u>If the Administrator and the Director disapproved the draft report of the completed RFI-I: and</u>				
V.J.1.i.		<u>If the Director and Administrator notified the Permittee, in writing of proposed modification to the report: and</u> <u>If after Date 24</u>: Has the Permittee submitted to the Director and the Administrator comments on the proposed modifications to the report on the RFI-I?				
V.J.1.ii.		a. If no, the effective date for the modification is Date 25.				

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**Indicates that a "no" response means compliance.

Figure 2

MONITORING LOCATIONS

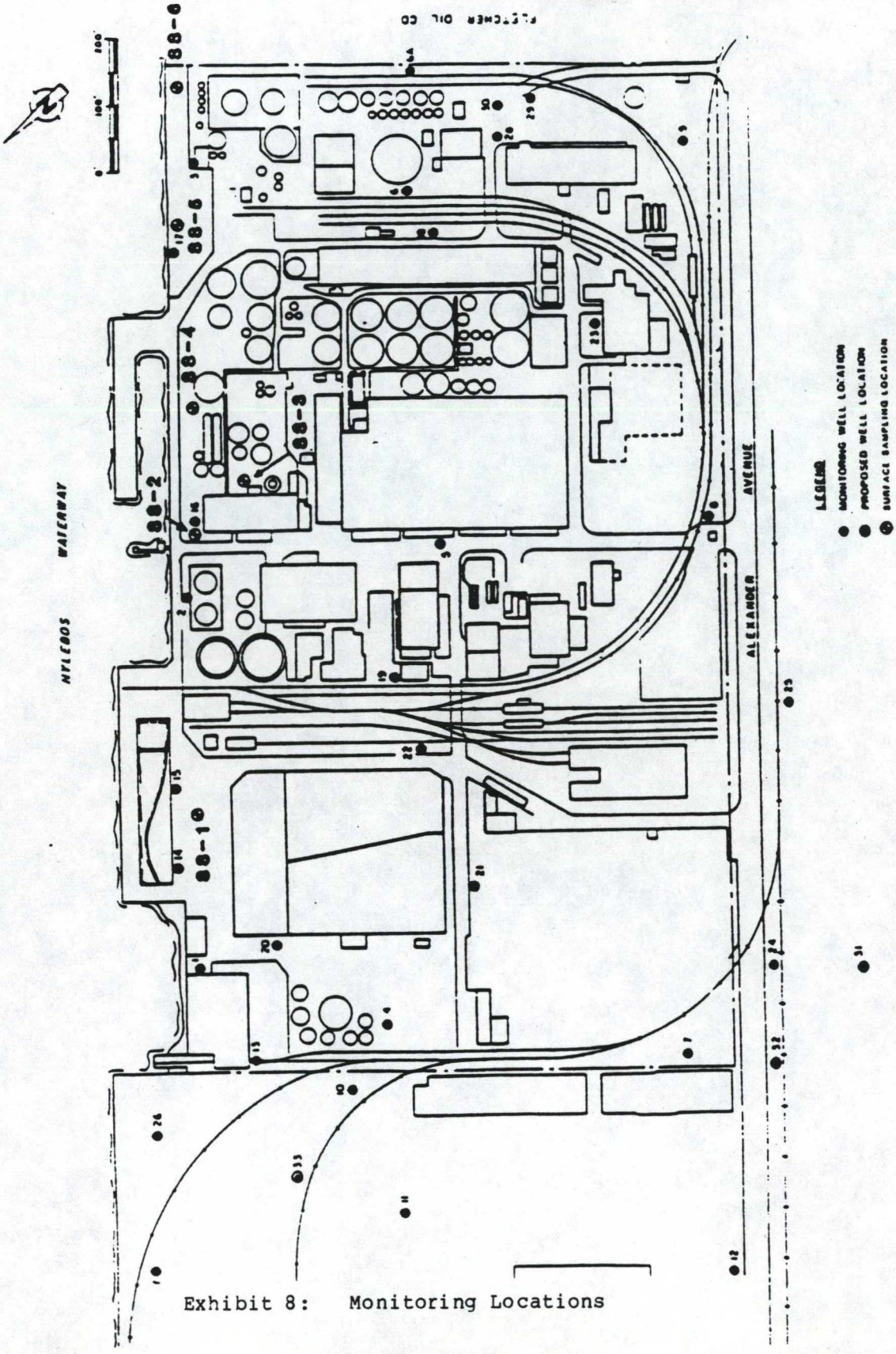

Exhibit 8: Monitoring Locations

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.A.4. (cont'd) V.J.1.iii. V.J.1.iii. V.J.1.iii.a.	8.	b. If yes, have the Director and Administrator notified the Permittee of the final decision on the effective date of the modification pursuant to permit condition V.J.1.iii? i. If no, the RFI-I report is not yet final and the modifications are not yet in effect. ii. If yes, the modification becomes effective on Date 26.				
V.A.5.	9.	Have progress reports on the RFI-I been submitted to the Director and Administrator by the 15th calendar day of every month, starting with December 15, 1988, and continuing until Date 23, 25, or 26, whichever is applicable? Date of last submittal:_____				
V.A.5. V.A.5.i. V.A.5.ii. V.A.5.iii. V.A.5.iv. V.A.5.v. V.A.5.vi.	10.	Have each of the progress reports on the RFI-I described above included the following: (As a spot check, select two (2) of the reports and check for the items listed below.) a. Description and estimate of work completed? b. Summaries of all findings? c. Summaries of all problems encountered during the reporting period? d. Actions taken to rectify problems? e. Projected work for the next reporting period? f. Copies of all quality assured data collected during the reporting period?				
V.A.8.	11.	<u>If the final RFI-I report revealed that the Clean-Up Standards of Table 9 on page 73 of the OCC permit are being exceeded; and</u> <u>If the Director and the Administrator requested, in writing, a corrective action plan and implementation schedule from the Permittee, and</u> <u>If after Date 28</u>: Has the Permittee submitted a corrective action plan and implementation schedule in accordance with the permit modification procedures of 40 CFR 270.41?				
V.B. V.B.1. ATT. 12 ATT. 13	12.	**<u>RCRA Facility Investigation II (hereafter called RFI-II) (Investigation in the Hylebos Waterway)</u>** <u>If after Date 30</u>: Has the Permittee completed the RFI-II activities described below as specified in Attachments 12 and 13 of the OCC Permit: a. One surface sample collected from each of the stations listed below (locations illustrated on Exhibit 9): i. SS1? ii. SS2? iii. SS3?				

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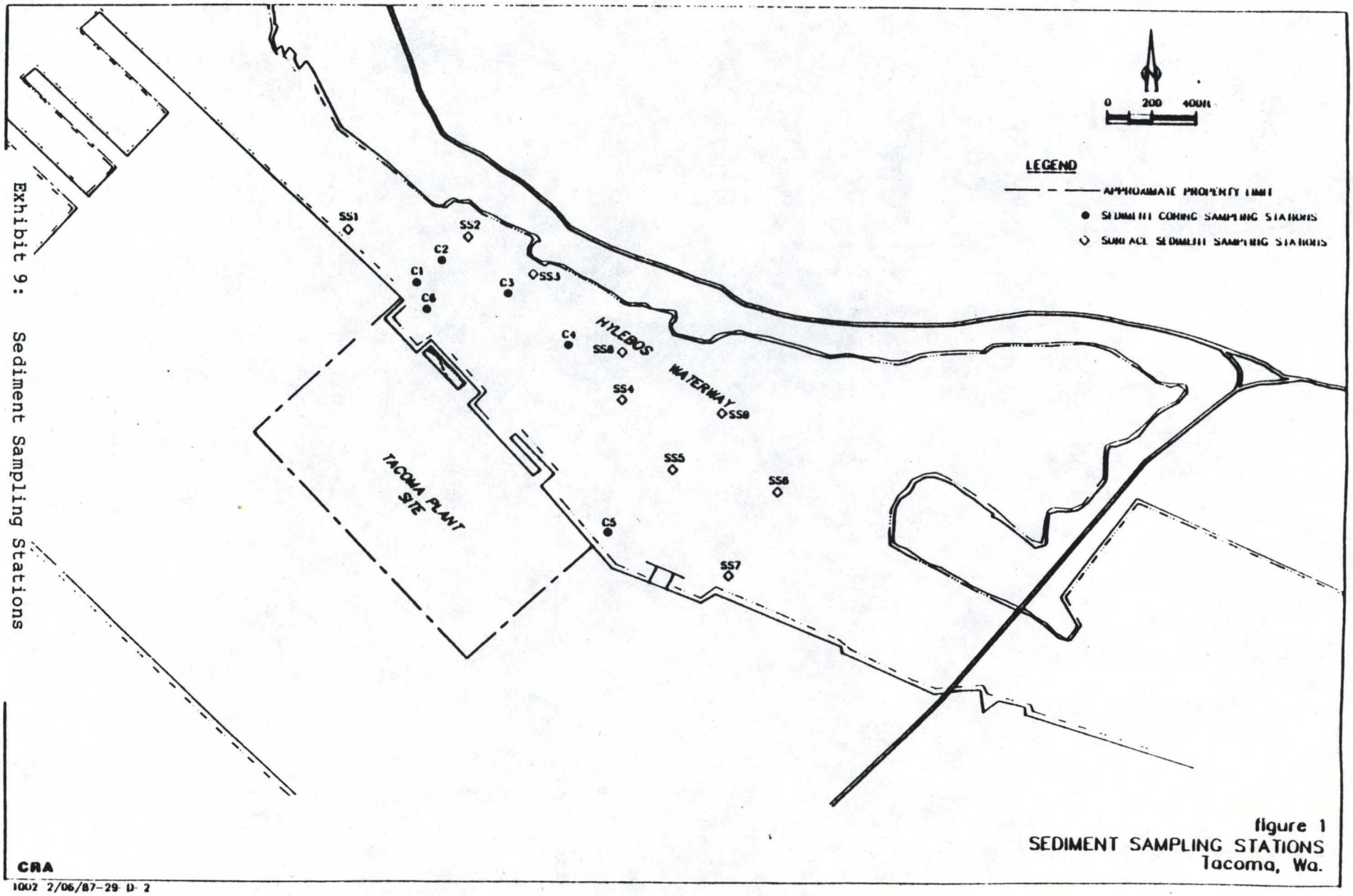

figure 1
SEDIMENT SAMPLING STATIONS
Tacoma, Wa.

Exhibit 9: Sediment Sampling Stations

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.B.1. (cont'd)	12.	iv. SS4? v. SS5? vi. SS6? vii. SS7? viii. SS8? ix. SS9? b. One sediment sample collected from the Blair Waterway, at a location selected in consultation with EPA/DOE? c. One sediment core collected from each of the stations listed below (locations illustrated on Exhibit 9): i. C1? ii. C2? iii. C3? iv. C4? v. C5? vi. C6? d. Surface sediment samples analyzed for the following parameters: i. Priority pollutant volatiles? ii. Base, neutral, and acid extractibles? iii. Pesticides (including PCBs)? iv. Metals? v. Chlorinated butadiene groups? vi. The specific parameters listed on Exhibit 10? e. Sediment cores analyzed for the following parameters: i. The specific parameters listed on Exhibit 10? ii. The general parameters listed on Exhibit 10?				
V.B.4. ATT. 12	13.	<u>If after Date 31</u>: Has the Permittee submitted a draft report of the completed RFI-II to the Director and the Administrator?				
V.B.4.i.	14.	<u>If after Date 31</u>: If the Permittee has submitted the draft report on the RFI-II, does the report include the following: a. Analyses of the surface samples collected from the locations listed below (locations illustrated on Exhibit 9) for the priority pollutant volatiles; base, neutral, and acid extractibles; pesticides (including PCBs); metals; chlorinated butadiene groups; and the specific parameters listed on Exhibit 10: i. SS1? ii. SS2? iii. SS3? iv. SS4?				

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TABLE 2

SPECIFIC PARAMETER LIST

Chloroform
Methylene Chloride
1,1-Dichloroethylene
trans-1,2-Dichloroethylene
Trichloroethylene
Tetrachloroethylene
1,1,2,2-Tetrachloroethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobenzene
Hexachlorobutadiene
Trichlorobutadienes
Tetrachlorobutadienes
Pentachlorobutadienes
Hexachlorocyclopentadiene
2,4,5-Trichlorophenol
Pentachlorophenol

Lead
Mercury

V.B.3.vii. Vinyl Chloride

GENERAL PARAMETER LIST

Total Solids
Total Volatile Solids
TOC
Oil and Grease
Grain Size - Selected Samples

V.B.3.viii. Sulfides

Exhibit 10: Specific and General Parameters Lists

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.B.4.i. (cont'd)	14.	v. SS5? vi. SS6? vii. SS7? viii. SS8? ix. SS9? b. Analyses of the sediment samples collected from the locations listed below for the specific and the general parameters listed on Exhibit 11? i. C1? ii. C2? iii. C3? iv. C4? v. C5? vi. C6?				
V.B.5.	15.	<u>If the Administrator and the Director approved the draft report on the completed RFI-II: and</u> <u>If after Date 33</u>: Has the Permittee submitted to the Director and the Administrator a final report on the RFI-II?				
V.B.5. V.J. V.J.1.i. V.J.1.ii. V.J.1.iii. V.J.1.iii. V.J.1.iii.a.	16.	<u>If the Administrator and the Director disapproved the draft report on the completed RFI-II: and</u> <u>If the Director and the Administrator notified the Permittee in writing of proposed modification to the report: and</u> <u>If after Date 34</u>: Has the Permittee submitted to the Director and the Administrator comments on the proposed modifications to the report on the RFI-II? a. If no, the effective date for the modification is Date 35. b. If yes, have the Director and Administrator notified the Permittee of the final decision and of the effective date of the modification pursuant to permit condition V.J.1.iii? i. If no, the RFI-II report is not yet final and the modifications are not yet in effect. ii. If yes, the modifications become effective on Date 36.				
V.B.7.	17.	Have progress reports on the RFI-II been submitted to the Director and Administrator by the 15th calendar day of every month, starting with December 15, 1988, and continuing until Date 33, 35, or 36, whichever is applicable? Date of most recent submittal: _____				
V.B.7.	18.	Have each of the progress reports on the RFI-II described above included the following: (As a spot check, select two (2) of the reports and check for the items listed below.)				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.B.7. (cont'd)	18.					
V.B.7.i.		a. Description and estimate of the work completed?				
V.B.7.ii.		b. Summaries of all findings?				
V.B.7.iii.		c. Summaries of all problems encountered during the reporting period?				
V.B.7.iv.		d. Actions taken to rectify problems?				
V.B.7.v.		e. Projected work for the next reporting period?				
V.B.7.vi.		f. Copies of all quality assured data collected during the reporting period?				
V.B.6.	19.	<u>If selection and/or implementation of corrective actions in the Hylebos Waterway has occurred</u>: Were the selection and/or implementation made as part of and coordinated with the Agency/ Department selection and implementation of remedial measures for the entire Hylebos Waterway in the CERCLA program, as amended by SARA, for the Commencement Bay Nearshore/Tideflats area?				
V.C.		<u>Pre-Corrective Action Monitoring Period Program</u>				
V.C.1.ii.	20.	<u>If after Date 40</u>: Has the Permittee submitted water table elevation contour maps constructed using the rate and direction of groundwater flow determined from the water table elevation measurements required under permit condition V.C.1.ii.?				
V.C.1.ii.	21.	<u>If after Date 40</u>: Has the Permittee also submitted a written review of the adequacy of the groundwater monitoring system relative to observed groundwater flow directions?				
V.C.1.v.	22.	<u>If after Date 37 and before Date 84</u>: Has the Permittee submitted quality-assured results for each of the quarterly groundwater sample analysis events required under the Pre-Corrective Action Monitoring Program within 30 days of receipt of the analysis results from the laboratory?				
V.C.1.v.	23.	<u>If after Date 37 and before Date 84</u>: Have any of the submitted analysis reports been received later than 90 days after the samples analyzed were collected?**				
V.C.1.v.	24.	<u>If after Date 37 and before Date 84</u>: Do the quarterly analysis results submitted as described above include laboratory detection limits achieved for each parameter? (As a spot check, select two submittals to evaluate to determine whether detection limits have been included.)				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

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SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.C.1.vi.a.	25.	<u>If after Date 84</u>: Has the Permittee submitted the first evaluation of the groundwater quality-assured results obtained from the first four groundwater monitoring sampling events conducted under the Pre-Corrective Action Monitoring Program?				
V.C.1.vi.a.	26.	<u>If the evaluation described above was submitted; and</u> <u>If after Date 42</u>: Does the evaluation include a determination of the total concentration of organics detected for each well per event and of the average concentration of organics detected for the four events for each well?				
V.C.1.vi.b.	27.	<u>If after Date 44 and before Date 84</u>: Has the Permittee submitted an evaluation for each of the quarterly monitoring events occurring subsequent to the evaluation described above?				
V.C.1.vi.b.	28.	<u>If after Date 44 and before Date 84</u>: Do the evaluations submitted as described above include a comparison of the total concentration of organics for each well to the average total concentration of organics for each well determined in the first evaluation conducted under the Pre-Corrective Action Monitoring Program? (As a spot check, select two submittals to evaluate to determine whether this evaluation has been conducted.)				
V.C.1.vi.b.	29.	Have any of the evaluations submitted as described above indicated that the total organic concentration for any well has significantly increased? (Significantly increased is defined as total organic concentration in any well being greater than 100% above the average determined in the first evaluation.)				
V.C.1.vii. a. and b.	30.	<u>If Item 29. Above, Was Answered Yes; and</u> <u>If after Date 46</u>: Has the Permittee submitted a notification of the increase of organics in a well and a notification that either; (1) the groundwater extraction system and the groundwater treatment system shall be operational within 30 days of submittal of the notification, or (2) the schedule in Table 3 of the OCC permit is revised to reflect implementation of all best efforts to accelerate the start-up of the groundwater extraction system and groundwater treatment system?				
V.C.1.viii.	31.	<u>If there is or has been any indication that a monitoring well must be replaced for any reason during the Pre-Corrective Action Monitoring Program</u>; a. Do the records document that the Permittee installed a replacement monitoring well within 90 days of the date the well was taken out of service?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.C.1.viii. (cont'd)	31.	b. Do the records document that the Permittee installed a replacement monitoring well using the following procedures: i. Casing pulled? ii. Well redrilled? iii. Well grouted to the land surface using a tremie pipe? iv. Grout used was a 4-5% Bentonite cement?				
V.C.1.xi.	32.	If after February 14, 1989: Do the records document that the Permittee closed all polyvinyl chloride pipe monitoring well installations?				
V.C.1.xi.	33.	Do the records document that any wells closed as discussed above were closed by overdrilling the installation, removing the well and grouting to the land surface using a tremie pipe and a 4-5% Bentonite grout?				
V.C.1.ix.	34.	Do the records document that the sampling program has been significantly hindered or delayed due to monitoring wells not maintained in good working order or by repairs not made in a timely manner?**				
V.C.1.ix.	35.	Do the records document that any sampling events have been significantly hindered or delayed due to a lack of replacement parts or repair equipment?**				
V.C.1.x.	36.	If after the first sampling event of the Pre-Corrective Action Monitoring Program: Do the records document that the Permittee calculated the specific capacity of all existing monitoring wells by slug testing during the first sampling event of the Pre-Corrective Action Monitoring Program? Date(s) of first calculations:_____				
V.C.1.x.	37.	Has the Permittee recalculated the specific capacity of each well annually since the first calculations discussed above?				
V.C.1.x.	38.	For any wells installed after November 16, 1988; Did the Permittee calculate the specific capacity of the well during the first sampling event for that well?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.C.1.x. (cont'd)	38.	Identification, Date of Installation, and Date of Specific Capacity Calculation for Any New Wells: _____ _____ _____ _____				
V.C.1.x.	39.	For any wells installed after November 16, 1988; Has the Permittee recalculated the specific capacity of the new well(s) annually since the date of first calculation?				
V.C.1.x.	40.	<u>If the specific capacity of any well has decreased by more than 20% of the original calculated value</u>; Do the records document that the well was redeveloped?				
V.D.		<u>Corrective Action for Contaminated Groundwater</u>				
V.D.1.	41.	<u>If after Date 48</u>: Has the Permittee submitted draft Groundwater Corrective Action Plans for the design, construction, operation, maintenance, and repair of a groundwater extraction system?				
V.D.1.	42.	<u>If after Date 48</u>: Do the draft Groundwater Corrective Action Plans meet the following requirements:				
V.D.1.i.		a. Applicable local, State and Federal regulatory requirements?				
V.D.1.ii.		b. Capable of recovering the groundwater, both on-site and off-site, which has been adversely impacted from the releases from the facility?				
V.D.1.iii.		c. Capable of preventing the non-permitted discharges into the Hylebos Waterway of groundwater, both on-site and off-site, which has been adversely impacted by the releases from the facility that are above the waterline at the seep locations described in permit condition V.A.1.ii.?				
V.D.2.	43.	<u>If after Date 48</u>: Do the draft Groundwater Corrective Action Plans for a groundwater extraction system submitted as described above also include the following details for conducting pump test(s):				
V.D.2.i.		a. Number, location, design and installation details for pumping well(s)?				
V.D.2.ii.		b. Pumping rate and duration?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.D.2. (cont'd)	43.					
V.D.2.iii.		c. Chemical and hydrogeological parameters to be determined from the pump test(s)?				
V.D.2.iv.		d. Designation of wells to be monitored during the pump test(s)?				
V.D.2.v.		e. Frequency of monitoring chemical parameters, and measuring water levels and pumping rates, for determining hydrogeologic parameters?				
V.D.2.vi.		f. Sampling procedures to be followed for the pump test(s)?				
V.D.2.vii.		g. Analytical and quality assurance and quality control procedures, in accordance with Appendix A of the OCC permit (which is included as Attachment A of this checklist), to be followed for the pump test(s)?				
V.D.2.vii.		h. Modeling procedures to be used to evaluate pump test(s) data?				
V.D.5.	44.	<u>If after Date 56</u>: Has the Permittee submitted a draft report of the pump test described above?				
V.D.5.	45.	<u>If after Date 56</u>: Does the draft report of the pump test include:				
V.D.5.i.		a. A detailed analysis and summary of all pump test results, including raw data and supporting calculations?				
V.D.5.ii.		b. Design criteria developed from the analysis of the pump test(s) results which is to be used in meeting the requirements for the groundwater treatment system under permit condition V.D.8.?				
V.D.5.iii.		c. Details of any modifications, based on the analysis of the pump test results, needed to be made to the groundwater extraction system's design, construction, operation and maintenance to meet the requirements of permit condition V.D.1.?				
V.D.5.iv.		d. Timeframe projections for meeting Clean-Up Standards based on pumping rates?				
V.D.5.v.		e. Schedule for implementation of modifications discussed in item c. above?				
V.D.6.	46.	<u>If the Administrator and the Director approved the draft report: and</u> <u>If after Date 58</u>: Has the Permittee submitted to the Director and the Administrator a final report of the pump test results?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.D.6.	47.	<u>If the Administrator and the Director disapproved the draft pump test report; and</u> <u>If the Director and the Administrator notified the Permittee, in writing, of proposed modification to the report; and</u> <u>If after Date 59</u>: Has the Permittee submitted to the Director and the Administrator comments on the proposed modifications to the pump test report?				
V.J.1.ii.		a. If no, the effective date for the modification is Date 60.				
V.J.1.iii.		b. If yes, have the Director and Administrator notified the Permittee of the final decision and of the effective date of the modification pursuant to permit condition V.J.1.iii?				
V.J.1.iii.		i. If no, the pump test report is not yet final and the modifications are not yet in effect.				
V.J.1.iii.a.		ii. If yes, the modifications become effective on Date 61.				
V.D.3. V.J.	48.	<u>If the Administrator and the Director disapproved the draft Corrective Action Plan for Groundwater Extraction System; and</u>				
V.J.1.i.		<u>If the Director and the Administrator notified the Permittee, in writing, of proposed modifications to the plan; and</u> <u>If after Date 64</u>: Has the Permittee submitted to the Director and the Administrator comments on the proposed modifications to the Corrective Action Plan for a Groundwater Extraction System?				
V.J.1.ii.		a. If no, the effective date for the modification is Date 66.				
V.J.1.iii.		b. If yes, have the Director and Administrator notified the Permittee of the final decision and of the effective date of the modification pursuant to permit condition V.J.1.iii.?				
V.J.1.iii.		i. If no, the Corrective Action Plan for a Groundwater Extraction System is not yet final and the modifications are not yet in effect.				
V.J.1.iii.a.		ii. If yes, the modifications become effective on Date 67.				
V.D.3.	49.	<u>If the Administrator and the Director approved the draft Corrective Action Plan for a Groundwater Extraction System; and</u> <u>If the Administrator and the Director approved the draft pump test report; and</u> <u>If after Date 69</u>: Has the Permittee submitted to the Director and the Administrator a final Corrective Action Plan for a Groundwater Extraction System?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.E.		**Monitoring Program and Data Evaluation for Corrective Action of Contaminated Groundwater**				
V.E.1.	50.	If after Date 78: Has the Permittee submitted a draft Groundwater Corrective Action Monitoring Plan?				
V.E.1.	51.	If after Date 78: Does the draft Groundwater Corrective Action Monitoring Plan described above include the following:				
V.E.1.i.		a. Technical support information of the design, installation operation, maintenance, and repair of a system for monitoring the effectiveness of the groundwater extraction system?				
V.E.1.i.a.		b. Provisions for creating a reversal of flowlines from the outer portion of the groundwater contamination towards the groundwater extraction system during all seasons and tidal conditions?				
V.E.1.i.b.		c. Provisions for meeting the groundwater Clean-up Standards specified on Exhibit 11 in groundwater, both on-site and off-site, which has been adversely impacted by the releases from the facility?				
V.E.1.ii.	52.	If after Date 78: Does the draft Groundwater Corrective Action Monitoring Plan specify the following:				
V.E.1.ii.a.		a. That any new monitoring wells included in the draft plan will be installed in accordance with the procedures in Attachment 11 of the OCC permit?				
V.E.1.ii.b.		b. That all sampling of monitoring wells under the draft plan will be performed in accordance with the procedures in Appendix A of the OCC permit (included as Attachment 1)?				
V.E.1.ii.c. Table 6		c. That all analysis of samples from monitoring wells included in the draft plan will include the parameters listed below: i. Methylene Chloride? ii. 1,2-Trans-dichloroethylene? iii. Trichloroethylene? iv. 1,1,2,2,-Tetrachloroethylene? v. Tetrachloroethylene? vi. Carbon Tetrachloride? vii. 1,1-Dichloroethylene? viii. Chloroform ix. 1,1,2-Trichloroethane x. Vinyl Chloride?				
V.E.1.ii.c.		d. That all analysis of samples from monitoring wells included in the draft plan will be performed in accordance with the procedures in Appendix A of the OCC permit (included as Attachment 1)?				

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Table 8

GROUNDWATER CLEAN-UP STANDARDS FOR SPECIFIC PARAMETER LIST

Parameter	Standard (ug/l)
Methylene Chloride	5.0
1,2-Trans-dichloroethylene	5.0
Trichloroethylene	5.0
1,1,2,2-Tetrachloroethane	5.0
Tetrachloroethylene	7.0
Carbon Tetrachloride	5.0
1,1-Dichloroethylene	5.0
Chloroform	6.0
1,1,2-Trichloroethane	6.0
Vinyl Chloride	10.0

Exhibit 11: Groundwater Clean-Up Standards for Specific Parameter List

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.E.1.ii. (cont'd)	52.					
V.E.1.ii.d.		e. That analysis of the parameters listed in item c., above, will be performed at least monthly for the first year of the plan's implementation and at least quarterly thereafter, until the schedule is modified in accordance with permit conditions V.F. or V.G.?				
V.E.1.ii.d.		f. That the monthly frequency for analysis during the first year described may be reduced to quarterly if the total organic concentration in all the wells monitored has stabilized? ("Stabilized" is defined as when a best fit line drawn through the points representing the total organic concentration at each well plotted versus time on a linear scale has a negative or 0 slope for at least a three-month period.)				
V.E.2.	53.	<u>If the Administrator and the Director approved the draft Groundwater Corrective Action Monitoring Plan: and</u> <u>If after Date 80</u>: Has the Permittee submitted to the Director and the Administrator a final Groundwater Corrective Action Monitoring Plan?				
V.E.2. V.J.	54.	<u>If the Administrator and the Director disapprove the draft Groundwater Corrective Action Monitor Plan: and</u>				
V.J.1.i.		<u>If the Director and the Administrator notified the Permittee, in writing, of proposed modification to the report: and</u> <u>If after Date 81</u>: has the Permittee submitted to the Director and the Administrator comments on the proposed modifications to the Groundwater Corrective Action Monitoring Plan?				
V.J.1.ii.		a. If no, the effective date for the modification is Date 82.				
V.J.1.iii.		b. If yes, have the Director and Administrator notified the Permittee of the final decision and of the effective date of the modification pursuant to permit condition V.J.1.iii?				
V.J.1.iii.		i. If no, the Groundwater Corrective Action Monitoring Plan is not yet final and the modifications are not yet in effect.				
V.J.1.iii.a.		ii. If yes, the modifications become effective on Date 83.				

*INR = Information Not Reviewed

**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.E.		<u>Approved Groundwater Corrective Action Monitoring Plan; Year One</u> (For Subsequent Years, go to Item 79)				
V.E.1.ii.d.	55.	<u>If after Date 84</u>: Has the Permittee been sampling wells monthly as required during the first year of implementation of the approved Groundwater Corrective Action Monitoring Plan (or quarterly, if the frequency of required monitoring has been changed to quarterly under the provisions of permit condition V.E.1.ii.d.)? (Document the sampling events that have occurred to date, or, as a spot check select three events to determine whether submittal deadlines have been met.) Date of Sampling Events Conducted During the First Year: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____				
V.E.5.	56.	<u>If after Date 84</u>: Has the Permittee submitted quality-assured analytical results of the analyses performed for each monthly sampling event required during the first year within the 30 days of the Permittee's receipt of the results from the laboratory (or quarterly sampling events, if the frequency of required monitoring has changed to quarterly under the provisions of permit condition V.E.1.ii.d.)? (Document the sampling events that have occurred to date, or, as a spot check select three events to determine whether submittal deadlines have been met.) Dates of Receipt of Results from Laboratory — Dates of Submittal to EPA/WADOE: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.E.5.	57.	<u>If after Date 84</u>: Has the Permittee submitted the quality-assured analytical results described above no later than 90 days after each sample collection event? (Document the sampling events that have occurred to date, or, as a spot check select three events to determine whether submittal deadlines have been met.) Dates of Sample Collection: (From Item 73) — Dates of Submittal to EPA/WADOE: (From Item 74)				
V.E.6.	58.	a. <u>If after Date 84</u>: Has the Permittee submitted an evaluation of the quality-assured analytical results described above within 30 days of the Permittee's submittal of analytical results for the first year of sample collection as documented above? b. If an evaluation was submitted, did the submittal include a determination of whether the Clean-up Standards on Exhibit 11 are being met for each parameter on Exhibit 12, at each monitoring point, for each sampling event? (Document the sampling events that have occurred to date, or, as a spot check select three events to determine whether submittal deadlines have been met.) Dates of Submittal to EPA/WADOE: — Dates of Submittal of Determination				

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**Indicates that a "no" response means compliance.

Table 6

SPECIFIC PARAMETER LIST

Methylene Chloride
1,2-Trans-dichloroethylene
Trichloroethylene
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Carbon Tetrachloride
1,1-Dichloroethylene
Chloroform
1,1,2-Trichloroethane
Vinyl Chloride

Exhibit 12: Specific Parameter List

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.E.4.	59.	If after Date 91: Has the Permittee submitted water table elevation contour maps constructed using the rate and direction of groundwater flow determined from the water elevation measurements required during the first year under the approved Groundwater Corrective Action Monitoring Plan?				
V.E.4.	60.	If after Date 91: Has the Permittee also submitted, with the contour maps, a written review of the adequacy of the approved Groundwater Corrective Action Monitoring Plan relative to the illustrated groundwater flow directions?				
V.F.		**Meeting the Clean-Up Standards**				
V.F.1.	61.	If after Date 93: Has the Permittee submitted a demonstration that adequate progress is being made towards meeting the Clean-up Standards on Exhibit 11, or has the Permittee submitted a plan for modification of the Groundwater Corrective Action Plan designed to meet the Clean-up Standards and a schedule for implementing the modified plan? ("Adequate progress" is defined as within the time frame projections included in the final report for the pump test required under permit condition V.D.6.)				
V.F.2.i.	62.	+If after Date 94: Has the Permittee notified the Director and Administrator in writing of the determination that the Clean-Up Standards on Exhibit 11 have been met for all parameters at all monitoring points under the approved Groundwater Corrective Action Monitoring Program for a year's monitoring period?				
V.F.2.v.	63.	+If after Date 94: and If the Permittee has completed the evaluation described in item 84: Has the Permittee submitted an application for a permit modification, including a proposal of Clean-Up Standards for each parameter analyzed as described above, and for addressing corrective action if these standards are being exceeded in any of the monitoring points included in the approved Groundwater Corrective Action Monitoring Plan?				
V.F.2.v.	64.	+If after Date 94: and If the Permittee has submitted an application for a permit modification as described in item 86: Does the application specify the following:				

+ Due dates not specified in the OCC permit.

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.F.2.v. (cont'd)	64.					
V.F.2.v.a.		a. That if the concentrations of the parameters determined under permit conditions V.F.2.iii. and V.F.2.iv. are above the Clean-Up Standards proposed by the Permittee in the application for a permit modification as described in item 63, the Permittee will revise the approved Groundwater Corrective Action Monitoring Plan to include monitoring for these parameters?				
V.F.2.v.b.		b. That if Table 9 of the OCC permit has not been substituted for Table 8 of the OCC permit, and if the concentration of the parameters on Table 8 of the OCC permit are below the Clean-Up Standards on Table 8 of the OCC permit, and if the concentration of the parameters determined under permit conditions V.F.2.iii. and V.F.2.iv. are all below the Clean-Up Standards proposed by the Permittee in the application for a permit modification as described in item 63, the Permittee will perform (using all the analytical data from the parameters, listed on Tables 8 and 10 of the OCC permit that are above the PQL) an evaluation of the health and environmental effects of the mixture of parameters in accordance with all Applicable Agency and Department Guidelines and Standards taking into consideration any toxicity bioassays performed under permit condition V.F.2.v.? (For parameters which are toxicants, the parameters should be grouped by target organ for the evaluation.)				
V.F.2.v.c.		c. That if the evaluation described in b. above indicates that the combined effect of the mixture of parameters exceeds any Applicable Agency and Department Guidelines and Standards, the Permittee will propose Clean-Up Standards for each parameter so that the resultant mixture shall meet all Applicable Agency and Department Guidelines and Standards?				
V.F.2.v.c.		d. That the Permittee will revise the Approved Groundwater Corrective Action Monitoring Plan to include the parameters described above that Clean-Up Standards have been proposed for?				
V.F.2.v.d.		e. That if Table 9 of the OCC permit has not been substituted for Table 8 of the OCC permit, and the concentration of the parameters on Table 8 are below the Clean-Up Standards on Table 8, and the concentration of the parameters determined under permit conditions V.F.2.iii. and V.F.2.iv. are all below the Clean-Up Standards determined under permit condition V.F.2.v., and the evaluation under permit condition V.F.2.v.b. indicated that the combined effect of the mixture of parameters meets all Applicable Agency and Department Guidelines and Standards taking into consideration any toxicity bioassays performed under permit condition V.F.2.v.; or if Table 9 of the OCC permit has been substituted for Table 8 of the OCC permit, and the concentration of the parameters of Table 9 are below the Clean-Up Standards on Table 9, and the concentration of the parameters determined under permit conditions V.F.2.iii. and V.F.2.vi. are all below the Clean-Up Standards determined under permit condition V.F.2.v., the Permittee will propose to:				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.F.2.v. (cont'd)	64.					
V.F.2. v.d.1.		i. Cease operation of the groundwater extraction system approved under permit conditions V.D.3. and V.D.7. and the groundwater treatment system pursuant to permit condition V.D.8.?				
V.F.2. v.d.2.		ii. Continue to follow the Approved Groundwater Corrective Action Monitoring Plan for three years after approval of this modification request and the data evaluation and reporting under permit conditions V.E.4., V.E.5., and V.E.6.?				
V.F.2. v.d.3.		iii. Maintain the groundwater extraction system approved under permit conditions V.D.3. and V.D.7. and the groundwater treatment system pursuant to permit condition V.D.8. in readiness for restarting. The systems shall be operated semi-annually for three consecutive days to demonstrate readiness to restart. The operation period shall follow within one week after the groundwater sampling?				
V.F.2. v.d.4.		iv. If any of the monitoring points in the Approved Groundwater Corrective Action Monitoring Plan are determined by the Permittee to exceed the Clean-Up Standards of the OCC permit during this three-year period, the Permittee shall notify the Director and Administrator, within 30 calendar days of the Permittee's receipt of quality-assured results from the laboratory that this determination was based on?				
V.F.2. v.d.4.	65.	<u>If after Date 97</u>: Has the Permittee submitted a notification of a determination that one or more of the monitoring points in the Approved Groundwater Corrective Action Monitoring Plan have exceeded the Clean-Up Standards of the OCC permit during the three-year period following cessation of operation of the groundwater extraction and treatment systems?				
V.F.2.v.d. 4.	66.	<u>If after Date 98</u>: Has the Permittee reestablished operation of the groundwater extraction and treatment systems or the applicable elements of these systems approved under permit condition V.D.3. and V.D.7. in accordance with permit condition V.D.8.?				
V.F.2.v.d. 4.	67.	<u>If after Date 98</u>: Has the Permittee continued to follow the approved Groundwater Corrective Action Monitoring Plan?				
V.F.3.	68.	<u>If at any time the Permittee submits a demonstration supporting the position that there are no local uses of groundwater which have been or are likely to be adversely impacted from the releases from the facility for drinking water purposes</u>: Does the demonstration include:				

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**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.F.3. (cont'd)	68.					
V.F.3.i.		a. an identification of all users of groundwater for drinking water purposes within 1 mile of the facility boundary, including reviews of applicable federal, state, and local regulatory agency records and contacts with all land owners and renters within the defined area?				
V.F.3.ii.		b. An evaluation of any groundwater drinking wells identified as described above, both hydrogeologically and with respect to water quality, to determine if the groundwater at the drinking water well is being impacted by the groundwater from the Permittee's site?				
V.F.3.	69.	If the Permittee has submitted a demonstration as described above; and If the demonstration was approved; and If after Date 100: Table 9 of the OCC permit is substituted for Table 8 at every reference in the permit to Table 8, with the exceptions of references in permit conditions V.F.2.v.b., V.F.2.v.d., and V.F.2.iv. as specified in the notification of approval sent to the Permittee by the Administrator and the Director.+				
V.F.3. V.J.	70.	If the Administrator and the Director disapproved the demonstration; and				
V.J.1.i.		If the Director and the Administrator notified the Permittee, in writing, of proposed modification to the demonstration; and If after Date 101: Has the Permittee submitted to the Director and the Administrator comments on the proposed modifications to the demonstration?				
V.J.1.ii.		a. If no, the effective date for the modification is Date 102, and Table 9 of the OCC permit is substituted for Table 8 at every reference in the permit to Table 8, with the exceptions of references in permit conditions V.F.2.v.b., V.F.2.v.d., and V.F.2.iv.				
V.J.1.iii.		b. If yes, have the Director and Administrator notified the Permittee of the final decision and of the effective date of the modification pursuant to permit condition V.J.1.iii.?				
V.J.1.iii.		i. If no, the demonstration is not yet final and the substitution of Table 9 for Table 8 is not yet in effect.				
V.J.1.iii.a.		ii. If yes, the demonstration and substitution of Table 9 for Table 8 as described above become effective on Date 103.				

+ Indicates that this item does not indicate compliance or noncompliance but is included only for information purposes.

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FACILITY NAME: **Occidental Chemical Corporation**

Inspection Date:_____

Inspector:_____

Location: **EPA/WA DOE Office**

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.G.	71.	If after Date 106: Has the Permittee submitted a closure plan for the groundwater extraction system, the groundwater treatment system, and the groundwater monitoring system?				
V.G.	72.	If after Date 106: Has the Permittee submitted a closure plan as a permit modification request in accordance with 40 CFR 270.41?				
V.G.	73.	If after Date 106: Does the closure plan submitted as described above include detailed procedures and a schedule for the disposal or decontamination of all elements of these systems?				
V.H.		**Corrective Action for Contaminated Groundwater Program Cost Estimate**				
V.H.1.	74.	If after Date 107: Has the Permittee submitted a detailed estimate of the capital, operating, and monitoring costs for the Corrective Action for Contaminated Groundwater Program (which includes the Groundwater Extraction system, the Groundwater Treatment System, and the Groundwater Monitoring System)?				
V.H.2.	75.	If after Date 109: Has the Permittee submitted a detailed estimate of the costs for implementing the closure plan for the Corrective Action for Contaminated Groundwater Program?				
V.H.5.	76.	If after Date 111: Has the Permittee submitted a revised cost estimate for the Corrective Action for Contaminated Groundwater Program?				
V.I.		**Corrective Action for Contaminated Groundwater Program Financial Assurance**				
V.I.	77.	If after Date 113: Has the Permittee submitted documentation of financial assurance established and maintained by one of the forms provided for under 40 CFR 264.143 in the amount of the estimate of the capital, operating, and monitoring costs for the Corrective Action for Contaminated Groundwater Program?				
V.I.	78.	If after Date 115: Has the Permittee submitted documentation of financial assurance established and maintained by one of the forms provided for under 40 CFR 264.143 in the amount of the estimate of costs for implementing the closure plan for the Corrective Action for Contaminated Groundwater Program?				

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**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.E.		**Approved Groundwater Corrective Action Monitoring Plan: After the First Year** Inspection Items 79. through 87. are to be used to evaluate the Permittee's compliance with the approved Groundwater Corrective Action Plan after the first year of implementation. The first year of implementation is addressed in items 55. through 60.				
V.E.1.ii.d.	79.	Has the Permittee sampled wells quarterly as required during implementation of the approved Groundwater Corrective Action Monitoring Plan? (Sampling continues quarterly until the schedule is modified in accordance with the permit conditions V.F. or V.G.; modify this checklist item to correspond with revised frequency if necessary.) (Document the sampling events that have occurred to date, or, as a spot check select two events to determine whether submittal deadlines have been met.) Dates of Sampling Events Conducted During the Year: _____ _____ _____ _____				
V.E.5.	80.	Has the Permittee submitted quality-assured analytical results of the analyses performed for each quarterly sampling event during the implementation of the approved Groundwater Corrective Action Monitoring Plan within 30 days of the Permittee's receipt of the results from the laboratory? (Document the sampling events that have occurred to date, or, as a spot check select two events to determine whether submittal deadlines have been met.) Dates of Receipt of Results from Laboratory — Dates of Submittal to EPA/WADOE: _____ _____ _____ _____				

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**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.E.5.	81.	Has the Permittee submitted the quality-assured analytical results described above no later than 90 days after each sample collection event? (Document the sampling events that have occurred to date, or, as a spot check select three events to determine whether submittal deadlines have been met.) Dates of Sample Collection: (From Item 79) — Dates of Submittal to EPA/WADOE: (From Item 80) _____ _____ _____ _____ _____				
V.E.5.	82.	a. Has the Permittee submitted an evaluation of the quality-assured analytical results described above within 30 days of the Permittee's submittal of analytical results for each sample collection event? Dates of Submittal to EPA/WADOE: — Dates of Submittal of Determination _____ _____ _____ _____ b. If an evaluation was submitted, did it include a determination of whether the Clean-up Standards on Exhibit 11 are being met for each parameter on Exhibit 12, at each monitoring point, for each sampling event?				
V.E.4.	83.	Has the Permittee annually submitted water table elevation contour maps constructed using the rate and direction of groundwater flow determined from the water elevation measurements under the approved Groundwater Corrective Action Monitoring Plan?				
V.E.4.	84.	Has the Permittee also submitted, with the contour maps, a written review of the adequacy of the approved Groundwater Corrective Action Monitoring Plan relative to the illustrated groundwater flow directions?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: EPA/WA DOE Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.F.		**Meeting the Clean-Up Standards**				
V.F.1.	85.	Has the Permittee annually submitted a demonstration that adequate progress is being made towards meeting the Clean-Up Standards on Exhibit 11, or has the Permittee submitted a plan for modification of the Groundwater Corrective Action Plan designed to meet the Clean-Up Standards and a schedule for implementing the modified plan? ("Adequate progress" is defined as within the time frame projections included in the final report for the pump test required under permit condition V.D.6.)				
V.H.		**Corrective Action for Contaminated Groundwater Program Cost Estimate**				
V.H.3.	86.	Has the Permittee annually submitted an estimate of the capital, operating, and monitoring costs for the Corrective Action for Contaminated Groundwater Program which has been adjusted for inflation?				
V.H.3.	87.	Has the Permittee annually submitted an estimate of the costs for implementing the closure plan for the Corrective Action for Contaminated Groundwater Program which has been adjusted for inflation?				

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**Indicates that a "no" response means compliance.

PART III: FACILITY OFFICE INSPECTION

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
I.F.14.	1.	If ownership of the facility was transferred: a. Do the records indicate that the Permittee notified the new owner, in writing, of the requirements of WAC 173-303-600 and -806 and the permit? b. Was the permit modified or revoked and reissued to allow ownership transfer?				
II.I.1.i.	2.	Is a written operating record maintained at the facility? Location: _____				
II.I.1.i.	3.	If so, does the Permittee maintain the following information in the operating records: a. A description of the quantity of wastes received and the methods and dates of treatment, storage, or disposal? b. The locations of dangerous waste at the facility and the quantity at each location? c. Records and results of waste analyses performed? d. Summary report and details of all incidents requiring implementation of the Contingency Plan? e. Records and results of inspections? f. Monitoring, testing, or analytical data? g. Closure cost estimates? h. Certification by the Permittee (at least annually) that the facility has a program to reduce volume and toxicity of hazardous waste, and that the proposed method of treatment, storage, or disposal is practicable and minimizes threats to human health or the environment? i. Signed agreements with (or refusal by) local emergency agencies to provide assistance in certain emergency situations? III.H.2. WAC 173-303-395(1)(b)and(c) j. Documentation of compliance with the Special Precautions for Incompatible Wastes?				

*INR = Information Not Reviewed

**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
I.F.10.ii.	4.	a. Has the Permittee retained the following records of monitoring information for a period of at least three years from the date of the sample, measurement, report, certification or recording unless a longer retention period is required? i. Calibration and maintenance records? ii. Records of all data used to complete the application for the Dangerous Waste Permit? b. Has the Permittee retained at the facility all monitoring records from all surface water sampling, seep sampling, soil sampling, sediment sampling, groundwater monitoring wells and associated groundwater surface elevations until three years past the end of corrective action instituted to address releases of hazardous waste or hazardous constituents from any solid waste management unit?				
I.F.10.iii. I.F.10. iii.a. I.F.10. iii.b. I.F.10. iii.c. I.F.10. iii.d. I.F.10. iii.e. I.F.10. iii.f.	5.	Do records of monitoring information include: (As a spot check, select two or three records to evaluate for inclusion of the listed items). a. The date(s), exact place, and times of sampling or measurements? b. The name(s), title, and affiliation of individual(s) who performed the sampling or measurements? c. The dates analyses were performed? d. The name(s), title, and affiliation of individual(s) who performed the analyses? e. The analytical techniques and methods used? f. The results of such analyses, including the QA/QC summary?				
I.I. I.I.1. I.I.2. I.I.3. I.I.4. I.I.5. I.I.7.	6.	Unless final facility closure has been completed and certified, are the following documents and any amendments, revisions, and modifications maintained at the facility: a. Waste Analysis Plan (Attachment 2 of OCC Permit)? b. Personnel Training Plan, documents, and records (Attachment 5 of OCC permit)? c. Contingency Plan (Attachment 7 of OCC permit)? d. Closure Plan (Attachment 8 of OCC permit)? e. Cost estimate for facility closure (Attachment 8 of OCC permit)? f. Inspection schedules (Attachment 4 of OCC permit)?				

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**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.E.I. ATT. 4	7.	Inspections a. Do the records indicate that the inspections listed below were documented using the forms indicated? If a modified inspection form was used, was all the information listed on the indicated form included on the modified form? (Inspection forms are presented in Attachments 2 through 17 of this checklist, as noted below for each form.)				

INSPECTION	FORM+	CHECKLIST ATTACHMENT NO.
i. SCBAs (general inspection)	Figure 6-3	2
ii. Fire Extinguishers (general inspection)	Figure 6-4	3
iii. Fire Extinguishers (maintenance and hydrostatic check as required)	Written Statement	---
iv. Fire Hydrants	Figure 6-5	4
v. Fire Hose and Hose House (general inspection)	Written Report	---
vi. Fire Hose and Hose House (hydrostatic check)	Figure 6-5.1	5
vii. Automatic Sprinkler	Figure 6-6	6
viii. Forklift and/or Front-End Loader	Figure 6-7	7
ix. Facility Gates	Figure 5-3	8
x. Waste Management Units (Shift Supervisor's Daily Environmental Report)	Figure 6-8	9
xi. Drum Storage Area A (east) (weekly inspection)	Figure 6-9	10
xii. Drum Storage Area B (west) (weekly inspection)	Figure 6-9	10
xiii. Drum Storage Areas A and B (shipping and post-shipment inspection)	Figure 6-10	11
xiv. Railcar Containers (weekly inspection)	Figure 6-11	12
xv. Railcar Containers (shipping and post-shipment inspection)	Figure 6-12	13

+ Figure Number from Attachment 4 of OCC Permit

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**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.E.I. ATT. 4 (cont'd)	7.	Inspections				
		INSPECTION / FORM+ / CHECKLIST ATTACHMENT NO.				
		xvi. Railcar Containers (non-destructive weld testing) — Written Report — --				
		xvii. Waste Pile and Building (weekly inspection) — Figure 6-13 — 14				
		xviii. Waste Pile (shipping and post-shipment inspection) — Figure 6-14 — 15				
		xix. Waste Pile (5-year inspection) — Figure 6-15 — 16				
II.E.I. ATT. 4		b. Do the inspection records demonstrate that the Permittee has conducted regular inspections according to the following schedule:				
		i. SCBAs (general inspection) — Monthly				
		ii. SCBAs (hydrostatic check) — Every 5 years or 3 years as appropriate				
		iii. Fire Extinguishers (general inspection) — Monthly				
		iv. Fire Extinguishers (maintenance and hydrostatic check, as required) — Annually				
		Date of last inspection:_____				
		v. Fire Hydrants (general inspection) — Annually				
		Date of last inspection:_____				
		vi. Fire Hose and Hose House (general inspection) — Monthly				
		vii. Fire Hose and Hose House (hydrostatic check) — Annually				
		Date of last inspection:_____				
		viii. Automatic Sprinklers (general inspection) — Quarterly				
		ix. Forklift or Front-End Loader (general safety and maintenance inspection) — Daily when used for hazardous waste				
		x. Perimeter Fencing — Daily				
		xi. Gates — Daily				

+ Figure Number from Attachment 4 of OCC Permit

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.E.I. (cont'd)	7.	Inspections ITEM — FREQUENCY				
		xii. Warning Signs — Daily				
		xiii. Perimeter Lighting — Daily				
		xiv. Waste Management Areas (Shift Supervisor's Daily Environmental Report) — Once each shift, 3 times per day				
		xv. Drum Storage Area A (east) (weekly inspection) — Weekly				
		xvi. Drum Storage Area B (west) (weekly inspection) — Weekly				
		xvii. Drum Storage Area A and/or B (shipping and post-shipment inspection) — Each time transport vehicles are loaded from area Date of last inspection:_____				
		vxiii. Railcar Containers (weekly inspection) — Weekly				
		xix. Railcar Containers (shipping and post-shipment inspection) — Weekly				
		xx. Secondary Containment Outer Sheet of Railcar Containers (non-destructive weld testing) — Every two years Date of last inspection:_____				
		xxi. Waste Pile and Building (weekly inspection) — Weekly				
		xxii. Waste Pile (shipping and post-shipment inspection) — Each time transport vehicles are loaded from waste pile				
		xxiii. Waste Pile (detailed inspection) — Every 5 years Date of last inspection:_____				
II.E.3. WAC 173-303-320 (2)(d)		c. Is an inspection log or summary of inspections kept at the facility?				
II.E.3. WAC 173-303-320 (2)(d)		d. Does the inspection log or summary of inspections include: a. Date and time of inspections? b. Handwritten signatures of inspectors? c. Notations of observations? d. Date and nature of repairs or remedial actions taken?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	N/A
II.E.I. (cont'd)	7.	Inspections				
II.E.3. WAC 173-303-320(3)		e. If any deterioration or malfunction was discovered during an inspection, do the records indicate that it was remedied on a schedule which prevents hazards to the public and the environment?				
II.E.3. WAC 173-303-320(3)		f. If a hazard was imminent or had already occurred, was remedial action taken immediately?				
III.F.1. ATT. 9 p.2-59		g. If accumulated liquids were discovered within the secondary containment device of either Railcar Container Storage Unit, do the inspection records indicate that the contents of the leaking railcars were transferred to the other Railcar Container Storage Unit, a standby shipping railcar, or a tanker truck as soon as possible?				
III.F.1. ATT. 9 p. 2-47 to p. 2-50		h. Is the integrity of the Railcar Container Storage Units' secondary containment system tested every two years in accordance with the non-destructive test methods of ASTM E-709 or ASTM E-165 (Liquid Dye Penetrant Testing)? If yes, specify the date when the last testing was conducted: _____.				
		i. If the results of the two-year inspection of the integrity of the Railcar Storage Units indicated that any of the welds are of questionable integrity, did the Permittee initiate a remedial program within 24 hours of notification of the results?				
I.I.2. II.F.	8.	Personnel Training a. Are the following documents maintained at the facility:				
I.I.2. WAC 173-303-330(2)		i. Written training plan?				
I.I.2. WAC 173-363-330(2)		ii. For each position related to dangerous waste management at the facility; the job title, job description, and the name of the employee(s) filling each job?				
I.I.2. WAC 173-303-330(2)		iii. Description of the type and amount of both introductory and continuing training required for each position?				
II.F. I.I.2. ATT. 5 p.10-29		iv. Records documenting the type of training completed and the completion date for current and former employees?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

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SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
I.I.2. II.F. (cont'd) II.F. ATT. 5 p. 10-3-8 Figure 10-1	8.	Personnel Training b. For the following positions, do the records demonstrate that all employees who have been in their positions for longer than six months have completed new employee environmental orientation, new employee safety orientation and environmental classroom training? As a spot check, select one position from each area and check to see that all individuals filling each position have completed the three training programs. (There may be individuals filling each position for each of the three shifts.) For information purposes, Exhibit 13 illustrates the organization of OCC personnel and those positions having dangerous waste management responsibilities. Plant Management 1. Production Superintendent 2. Plant Engineer 3. Superintendent of Environmental Control 4. Shift Supervisors (3) 5. Environmental Specialist 6. Safety Superintendent Chlorine Process Area 7. Chlorine Leader 8. Chlorine Process Area General Helper 9. Chlorine Maintenance 10. Chlorine Operator (4) 11. Chlorine Helper A (4) 12. Chlorine Helper B (4) Electrolytic Process Area 13. Cell Repair Leader 14. Cell Operation Leadman 15. Cell Construction Leader 16. Cell Construction Helper 17. Cell Repair A 18. Cell Repair B 19. Cell Repair C 20. Cathode Maker 21. General Helper 22. Laborer Maintenance 23. Maintenance A 24. Maintenance B 25. Maintenance C Technical Assistance 26. Works Chemist 27. Analytical Chemist 28. Senior Technician 29. Technician 30. Technical Aide Ammonia/Brine Processing Department 31. Lead Person 32. Press Person 33. Brine Sludge Helper				

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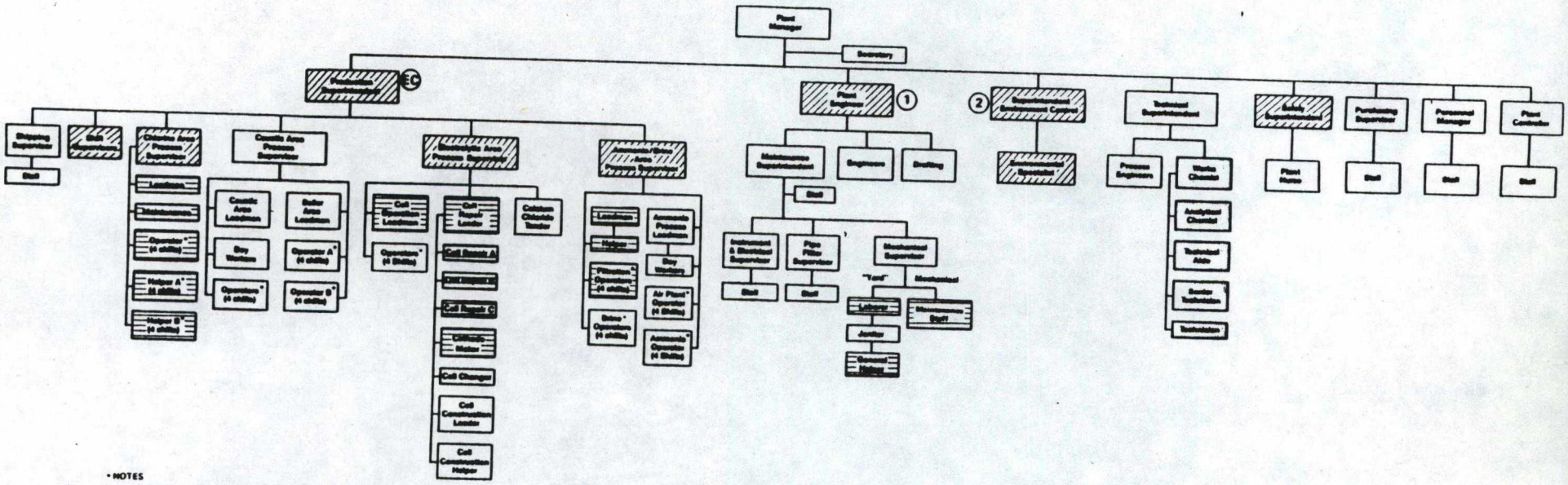

• NOTES

1. Positions indicated as having 4 shifts have 3 daily shifts with one shift off. Shifts rotate.
2. Day workers serve as relief operators in their assigned process areas.

LEGEND

- MANAGEMENT RESPONSIBILITIES
- ROUTINE HANDLING OF REGULATED WASTES
- INVOLVED IN TESTING OR ANALYSIS OF REGULATED WASTES
- EC EMERGENCY COORDINATOR
- ① FIRST ALTERNATE EMERGENCY COORDINATOR
- ② SECOND ALTERNATE EMERGENCY COORDINATOR

FIGURE 10-1
REGULATED WASTE MANAGEMENT AND HANDLING ORGANIZATIONAL CHART
Occidental Chemical Corporation
Tacoma, WA

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.F. (cont'd)	8.	Personnel Training				
ATT. 5 p. 10-20		c. For the following positions, do the records demonstrate that all employees who have been in their positions for longer than six months have completed the following required on-the-job training programs:				
		1. Analytical Chemist +5 2. Cathode Maker 1 3. Cell Repair 1,2 4. Cell Repair Leader 1,2 5. Chlorine Maintenance 3 6. Chlorine Operator 3 7. Chlorine Operator Helper 3 8. Filter Press Person 1 9. General Helper 1,2,4 10. Laborer 2,4 11. Senior Technician 5 12. Shop Maintenance 1 13. Technical Aide 5				
		+On-The-Job Training Programs 1. Drum Container Storage 2. Storage Waste Piles 3. Railcar Container Storage 4. Physical Treatment and Liquid Phase Separation 5. Sampling, Sample Preparation, and Analytical Methods				
I.F. ATT. 5 p. 10-21		d. Do the records document that all employees filling positions involving hazardous waste management (listed in item b) who have been in their positions for longer than a year have attended both the Annual Environmental Review Program and the Annual Classroom Training Review Program annually since November of 1988?				
I.F.10.ii. I.I.2. I.F. ATT. 5 p. 10-29		e. Unless closure of the facility has been certified by a registered professional engineer, are records documenting the training director's experience, all job titles, job descriptions, names of employees and completed training programs kept on site in the office of the facility for current employees, and for three years from the date of an individual employee's termination for former employees?				
I.F. ATT. 5 p. 10-24 I.I.2.		f. Do the records demonstrate that safety meetings are held once a week in the chlorine, electrolytic, and brine process areas of the plant?				
I.F. ATT. 5 p. 10-24, 10-25 I.I.2.		g. Do the records demonstrate that safety meetings are held once a month in technical and support units of the plant?				
I.F. ATT. 5 p. 10-26 I.I.2.		h. Do the records demonstrate that the current members of the emergency brigade have received hands-on training and drilling at least annually since November of 1988?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.F. (cont'd) I.F. ATT. 5 p. 10-26 I.I.2.	8.	Personnel Training i. Do the records demonstrate that the current members of the emergency brigade been involved in field work and classroom training at least monthly since November of 1988?				
I.F. ATT. 5 p. 10-27 I.I.2. I.F.1.i.		j. Do the records demonstrate that the employees filling the positions listed below have participated in a state-certified first aid training program or a 1-year certification program that includes an 8-hour instruction class and a 3-hour annual refresher course: i. Emergency Coordinator (Production Superintendent)? ii. Emergency Coordinator Alternates: Plant Engineer? Superintendent of Environmental Control? iii. Environmental Specialist? iv. Emergency Squad Members? v. Production Supervisors: Chlorine Area Process Supervisors? Caustic Area Process Supervisor? Electrolytic Area Process Supervisor? Ammonia/Brine Area Process Supervisor? vi. Designated Shift Employees?				
I.F. ATT. 5 p. 10-22 I.I.2.		k. Do the records indicate that the current Training Director (Environmental Specialist) is Lyle Feller?				
I.F. ATT. 5 pp. 10-22 I.I.2.		l. If the Training Director (Environmental Specialist) is not Lyle Feller, do the records indicate that the new training director's qualifications meet the following criteria: i. Equivalent of a B.A. degree in chemical engineering, chemistry or a related field? ii. A minimum of 5 years' experience in chemical plant process improvement, maintenance, or environmental control and reporting? iii. Trained in hazardous waste management, including familiarity with conducting routine inspections of regulated waste management areas?				
II.F. ATT. 7	9.	Contingency Plan a. Has there been a fire, explosion, or release of dangerous wastes or constituents that potentially threatened human health or the environment?** If yes, was the Contingency Plan implemented?				

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Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.F. ATT. 7 (cont'd)	9.	Contingency Plan				
II.H.1. ATT. 7		b. If the Contingency Plan was implemented since the last inspection, do the records indicate that the following steps, as described in the Contingency Plan (Attachment 7 of the OCC permit) were completed:				
ATT. 7 p. 8-12		i. Observation and in-plant notification?				
p. 8-(13-17)		ii. Activation?				
p. 8-17		iii. Initial assessment and evaluation?				
p. 8-18		iv. Evacuation plan?				
p. 8-(19-23)		v. Identification of hazardous materials?				
p. 8-(23-26)		vi. Assessment and off-site notification?				
p. 8-(26-36)		vii. Control procedures?				
p. 8-(36-37)		viii. Prevention of recurrence or spread of fire, explosions, or releases?				
p. 8-(37-38)		ix. Storage and treatment of released material?				
p. 8-39		x. Separation of incompatible wastes?				
p. 8-39.2		xi. Post-emergency equipment maintenance?				
ATT.7 p. 8-8		c. As a spot check, contact the head of one of the following departments to determine whether a copy of the Contingency Plan is available in the department office:				
		i. OCC Office of Superintendent of Environmental Control?				
		ii. OCC Office of Environmental Specialist?				
		iii. OCC Office of Production Superintendent?				
		iv. OCC Office of Shift Supervisors?				
		v. OCC Office of Plant Engineers				
		vi. OCC Office of Boilerhouse Operating Engineers?				
ATT. 7 p. 8-8		d. As a spot check, contact one of the following to determine whether a copy of the OCC Contingency Plan was provided by the Permittee and is on file with the organization:				
		i. City of Tacoma Fire Department?				
		ii. Tacoma General Hospital?				
		iii. Washington State Department of Ecology, Southwest Regional Office, Olympia, Washington?				
		iv. City of Tacoma Police Department?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.F. ATT. 7 (cont'd)	9.	Contingency Plan				
II.H.1. ATT. 7 p.8-59,60		e. Do the records document that the contact letters included in Attachment 17 of this checklist (from Appendix 8-E of Attachment 7 of the OCC permit) were sent to the following organizations upon OCC permit issuance (November 16, 1988): i. City of Tacoma Fire Department? ii. Tacoma General Hospital? iii. City of Tacoma Police Department? Date(s) letters sent: _____ If yes, do the records indicate that return responses were received? Date(s) responses received: _____				
II.H.1. ATT. 7 p.8-62		f. Do the records indicate that any of the following events have occurred which would require amendment of the Contingency Plan: i. The plan failed in an emergency?** ii. The facility permit has been revised or applicable regulations have changed?** iii. The facility made changes that increase or decrease the potential for releases of dangerous waste or waste constituents?** iv. Changes have occurred in the response necessary in an emergency?** v. The emergency coordinators have changed?** vi. The emergency equipment has changed substantially?**				
II.H.1. ATT. 7 p. 8-63		g. If the Contingency Plan has been amended, do the records indicate that the amended plan has been submitted to the organizations listed in item c. above?				
I.D.1. WAC 173-303-830(3)(4), & (5) §270.41, .42, .43		h. If the Contingency Plan has been amended, do the records indicate that the amended plan has been submitted as a modification to the permit?				
II.H.1. ATT. 7 p. 8-9		i. Is the emergency coordinator or an alternate on the facility premises or on-call (by telephone or radio pager) at the time of the inspection (a list of the Emergency coordinator and alternates is presented on the next page as Exhibit 14)?				

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Table 8-3
EMERGENCY COORDINATORS

Emergency Coordinators	Phone Numbers		Radio Pager No.[a]	Home Address
	Work	Home		
Primary				
Curt Webber Production Superintendent	593-1362	584-2684	594-3057	7826 - 76th St SW Tacoma, WA 98498
Alternates				
(Primary) Stanley Hearn Plant Engineer	593-1355	752-8064	594-3059	1326 North 1st St Tacoma, WA 98406
(Secondary) Robert Hartman Superintendent of Environmental Control	593-1359	952-6701	594-3119	1921 96th Ave. Ct, E Puyallup, WA 98371

[a] Radio pager with area-wide channels.

Exhibit 14: Emergency Coordinators

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.F. ATT. 7 (cont'd) II.H.1. ATT. 7 p. 8-58 II.H.1. ATT. 7 p. 8-61	9.	Contingency Plan j. Do the records document tours of the OCC plant and waste management areas by the Tacoma Fire Department? k. If an incident has occurred since the last inspection that involved releases of regulated wastes to the environment, in response to which the Contingency Plan was not implemented: i. Is documentation maintained in the Environmental Department? ii. Did the Permittee notify the National Response Center? iii. Did the Permittee prepare appropriate reports as required by 40 CFR 302.4 (CERCLA reporting requirements)?				
II.C.	10.	Waste Analysis Plan For information purposes; the Permittee stores the following wastes in units identified below. Waste numbers correspond to numbers used in Exhibit 3. Railcar Containers: 1. Chlorinated Hydrocarbons/ Sulfuric acid mixture — K073, D002 2. Decanted Chlorinated Hydrocarbons — K073 3. Decanted Sulfuric Acid — D002, K073 4. Chlorinated Hydrocarbons — K073 Drum Storage Unit 4a. Solid Residues from Closure and/or Spill Cleanup of Waste No. 4 above — K073 5. Spent Graphite Electrode Blades and Butts, Mastic, and Dross — D008 6. Contaminated Clothing — K073 Graphite Waste Pile Building 5. Spent Graphite Electrode Blades and Butts, Mastic, and Dross — D008				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.C.1. ATT. 2 p. 4-11, 12, 15, 33	11.	Waste Analysis Plan requirements documented in the OCC Tacoma Plant Laboratory				
II.C.2.iii. ATT. 2 p. 4-33		a. Are copies of all analysis methods listed below maintained in OCC's Tacoma Plant Laboratory:				
		i. ASTM-E-223?				
		ii. Standard Methods for the Examination of Water and Wastewater No. 408?				
		iii. Analysis method for halogenated hydrocarbons from WAC 173-303?				
		iv. SW-846 No. 5030?				
		v. SW-846 No. 8010 with modifications?				
		vi. OCC Test Method for Chlorinated Hydrocarbon Concentrations?				
		vii. SW-846 1310?				
		viii. SW-846 7420?				
		ix. SW-846 7420 with wavelength modifications for copper analysis?				
		x. SW-846 7520?				
		xi. SW-846 9095?				
ATT. 2 p. 4-37		b. Is a bound, written log documenting instrument maintenance procedures maintained in OCC's Tacoma Plant Laboratory?				
ATT. 2 p. 4-37		c. Do the maintenance log entries include the following information:				
		i. Equipment description?				
		ii. Model number?				
		iii. Serial number?				
		iv. Date of installation?				
		v. Maintenance performed?				
		vi. Who performed maintenance?				
		vii. Date maintenance performed?				
		viii. Date of next maintenance?				
ATT. 2 p. 4-37		d. Has instrument maintenance been conducted as frequently as required by the maintenance schedule (indicated by the date of next maintenance noted in each entry)?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.C.1 (cont'd)	11.	Waste Analysis Plan requirements documented in the OCC Tacoma Plant Laboratory				
ATT. 2 p. 4-38		e. Are bound, written records for documentation of calibration for each instrument maintained in OCC's Tacoma Plant Laboratory?				
ATT. 2 p. 4-38		f. Do the bound, written calibration records each include the following information: i. Equipment description? ii. Model number? iii. Serial number? iv. Date of installation? v. Calibration procedure? vi. Calibration schedule? vii. Calibrations performed? viii. Who performed calibration? ix. Date calibrations performed? x. Date of next calibration?				
ATT. 2 p. 4-38		g. Has instrument calibration been conducted as frequently as required by calibration schedules?				
ATT.2 p. 4-38		h. In OCC's Tacoma Plant Laboratory, are bound notebooks used for recording the following: i. Sampling information? ii. Chain-of-custody information? iii. Legal data? iv. Proficiency testing?				
ATT. 2 p. 4-38		i. Are the bound recordkeeping notebooks numbered?				
ATT. 2 p. 4-38		j. Does the Works Chemist maintain an indexing of the notebook number and the analyst responsible for its maintenance?				
ATT. 2 p. 4-39		k. Are all records associated with a particular sample kept in a single folder identified with a project number and description?				
I.I.6. WAC 170-303-380(1) ATT. 2 p. 4-8, 4-13		l. Do the records indicate that the wastes identified below are analyzed according to the following schedule?				

Waste	Frequency	Method
Chlorinated Hydrocarbon/ Sulfuric Acid Mixture	When storage rail car is emptied to shiping railcar or other transport vehicle	ASTM-E-223 SW-846 8010+ SM 408

+ Modified test method as specified in OCC permit.

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.C.1 (cont'd) I.I.6. WAC 170-303-380(1) ATT. 2 p. 4-8, 4-13	11.	Waste Analysis Plan requirements documented in the OCC Tacoma Plant Laboratory Waste / Frequency / Method Decanted Chlorinated Hydrocarbons — Prior to shipment to off-site management facility — SM 408, SW-846 8010+ Decanted Waste Sulfuric Acid — Prior to shipment to off-site management facility — ASTM-E-223, % Ttl Solids, SW-846 8010+, SW-846 7420, SW-846 7420+, SW-846 7520 Chlorinated Hydrocarbons — When storage railcar is emptied to shipping railcar or other off-site transport vehicle — SW-846 8010+, SM 408 Spent Graphite Anode Blades and Butts, Mastic and Dross — Monthly — SW-846 9095 Graphite Butts, Mastic and Dross — Quarterly — Visual insp., SW-846 1310/lead, SW-846 7420 Graphite Blades — Semiannually — Visual insp., SW-846 1310/lead, SW-846 7420, WAC 173-303 method for halogenated hydrocarbons Contaminated Clothing — When container (drum) of materials is generated — % moisture, SW-846 8010+				
II.J.6. ATT. 8 II.J.12. ATT. 8 II.J.13.	12.	Closure Plan a. Did the Permittee decontaminate and dispose of all facility equipment as specified in the closure plan? b. If the Permittee's modification request is denied by the Director and the Administrator, did the Permittee resume closure activities within 30 calendar days of receipt of the denial notice? c. If the Permittee's modification request is granted by the Director and the Administrator, did the Permittee:				

+ Modified test method as specified in OCC permit.

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.J.6. (cont'd) II.J.8.i. II.J.8.ii.	12.	Closure Plan i. Complete an evaluation of the extent, character, magnitude and impact on health or the environment posed by the release? ii. Address corrective action for the release?				
II.K. II.K.2. WAC 173-303-620(3)(c) II.K.3. WAC 173-303-620(3)(b) II.K.1. 11.K.4. WAC 173-303-620(3)(d) II.L. WAC 173-303-620(4) and (10) ATT.8 p. 11-68	13.	Financial Assurance a. Closure Cost Estimate i. The closure cost estimate was $_____, as of _____, the anniversary date. Do the records indicate that the estimate has been adjusted for inflation within 30 days of the anniversary date each year? ii. Has the Permittee revised the closure cost estimate if there has been a change in the facility's Closure Plan? - Revised Amount $_____ - Date _____ iii. Is the latest closure cost estimate for each individual dangerous waste management unit maintained at the facility? b. Financial Mechanism for Closure i. Do the records indicate that the Permittee continues to meet the financial test and corporate guarantee for closure for the current cost estimate? ii. Have there been any changes in the mechanism? iii. Do the records indicate that the Permittee received approval from the Director for those changes?				
II.N. WAC 173-303-620(8) and (10)	14.	Liability Requirements a. Do the records indicate that the Permittee has maintained liability coverage for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs? Expiration date of insurance certificate:_____				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTION IV: WASTE PILE STORAGE

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
IV.C.2. ATT. 9 p.2-29,2-30 APP. 2-D, pp.2-D-1 to 2-D-3	1.	Was the containment sump, located in the northeast corner of the Graphite Waste Pile Building, decommissioned and a new sump system installed? If yes, do the construction QC records indicate that: a. Standard manhole and PVC pipe installation techniques were used (e.g., use of select bedding and backfill materials to minimize settlement and point loading on pipe materials? b. That the 3-inch-diameter PVC drain line, which drained to the sump located in the northeast corner of the waste pile building, was uncovered and emptied of all liquids?				
IV.F. WAC 173-303-660(6)	2.	<u>Graphite Waste Pile Building Containment System Repairs</u> a. Did the Permittee develop a containment system evaluation and repair plan for the Graphite Waste Pile Building which describes the following: i. Testing and monitoring techniques? ii. Procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure? iii. Schedule of actions to be taken in the event of a possible failure? iv. Repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the waste pile to be removed from service? b. Was the containment system inspected in accordance with the provisions of the containment system evaluation and repair plan whenever there was any indication of a possible failure of the containment system? c. Was the Graphite Waste Pile Building removed from service upon a positive indication of a failure of the containment system (e.g., identification of a hole, tear, crack or separation in the base)? d. If yes, did the Permittee: i. Immediately stop adding wastes to the pile? ii. Immediately contain any leakage which had occurred or was occurring? iii. Immediately cause the leak to be stopped? iv. Remove the waste from the base if the leak could not be stopped by any other means? e. If the waste pile was removed from service, did the Permittee conduct the following activities, prior to restoring service: i. Repair the containment system?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTION IV: WASTE PILE STORAGE

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
IV.F. (cont'd)	2.	Graphite Waste Pile Building Containment System Repairs ii. Obtain certification from a qualified engineer, which states that the containment system meets the design specifications approved in the permit? f. If the Graphite Waste Pile Building was removed from service and not repaired, was it closed in accordance with WAC 173-303-660(9)?				
IV.F. WAC 173-303-660(6) ATT. 7 Appendix 8-G	3.	Graphite Waste Pile Building Containment System Repairs a. Has there been any indication of a possible failure of the Waste Pile Building Containment System that caused the Permittee to implement the Waste Pile Contingency Plan Procedures, Appendix 8-G of the Contingency Plan?** b. If yes, was the waste pile removed from service if there was a positive indication of a possible failure? c. If the waste pile was removed from service and repaired, were the repairs certified by a qualified engineer as meeting the design specifications in the permit before the pile was restored to service? d. If the waste pile was removed from service and was not to be repaired, was the pile closed in accordance with the closure plan?				
IV.C.2. ATT. 10	4.	a. Was the containment sump, located in the northeast corner of the Graphite Waste Pile Building, decommissioned and a new sump system installed by December 30, 1988? b. If yes, was it necessary for the facility to deviate from the design specifications and procedures contained within Attachment 10 of the Permit issued November 30, 1988, to accommodate proper decomissioning and closure?** i. If yes, were the deviations noted on as-built drawings and submitted to the Director as part of the modification certificate document after completion of decommissioning and construction? (Check with WADOE Office.) ii. If yes, was the rationale for the deviations provided in a narrative form and submitted to the Director as part of the modification certification document after completion of decommissioning and construction? (Check with WADOE Office.)				
IV.E.3. WAC 173-303-395(5)(b) WAC 173-303-830(3)	5.	If the Graphite Waste Pile Building is not completely emptied at least once every five years, did the Permittee submit a a modification request form and obtain a permit modification from the Director for an extension? (Building should be first emptied by November 16, 1993.)				

*INR = Information Not Reviewed

**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Facility Office

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.H.6.	1.	If the Corrective Action for Contaminated Groundwater Program is in operation, is a copy of the latest cost estimate and adjustments made to the cost estimate maintained at the facility?				

*INR = Information Not Reviewed
**Indicates that a "no" response means compliance.

PART IV: FACILITY INSPECTION

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

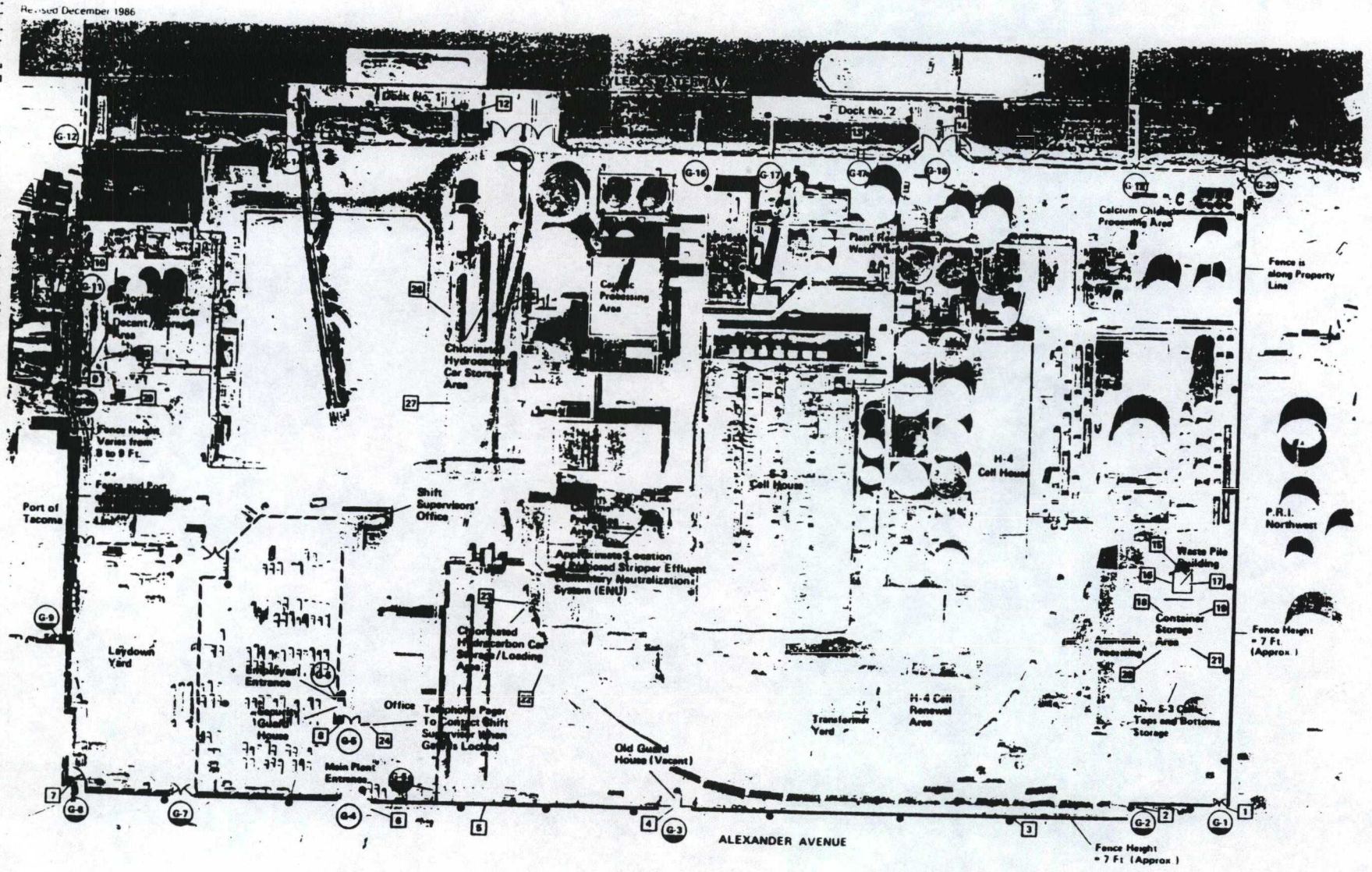
Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.G.1. ATT.6 p. 7-(25-26)	1.	Is there any indication that ignitable or reactive wastes are or have been stored in permitted waste management units? (The facility is not permitted to manage such wastes but may manage them in separate generator accumulation areas under WAC 173-303-200.)				
II.D.1.	2.	<u>Security</u>				
ATT.3 p. 5-5, 5-10		a. Is the entire facility surrounded by fencing or barriers as is illustrated on Exhibit 15 of this checklist?				
ATT. 3 p. 5-5		i. South and west sides of plant: 7-foot-high wooden fence with intermittent sections of chain-link fence?				
ATT. 3 p. 5-5, 5-10		ii. East and major portion of north side; 6- to 7-foot-high chain-link fence topped with three strands of barbed wire?				
ATT. 3 p. 5-10		iii. Northern end of eastern side of facility between gates G-12 and G-13: 15-foot wall of Plant Stores Building?				
ATT. 3 p. 5-10		iv. Portion of north side that is not fenced: 2-story Port of Tacoma buildings?				
ATT. 4 p. 6-29		b. Are the fences and barriers in good repair?				
ATT. 3 p. 5-1, 5-5		c. Is a security guard on duty at the main plant gate (Gate G-5 shown on Exhibit 15)? [Unless it is C shift (graveyard), when the main plant gate (G-5 on Exhibit 15) and the employee gate (G-6 on Exhibit 15) may be locked while the guard is touring the plant.]				
ATT. 3 p. 5-1		d. Is the security guard at the main plant gate in contact with a representative of plant management by two-way radio or telephone?				
ATT. 3 p. 5-3		e. Is the security guard:				
		i. Logging in the number of visitors, contractors, and vendors entering the plant?				
ATT. 3 p. 5-3		ii. Recording the license plate numbers of tanker trucks and other vehicles entering the plant?				
ATT. 3 p. 5-3		iii. Recording activities during the shift on the Security Guard Daily Report Form, included as Exhibit 16?				
ATT. 3 p. 5-5		iv. Has a Tour Report form, included as Exhibit 17, been completed by the "C" shift security guard for each night of the past seven days?				

*INR - Information Not Reviewed

**Indicates that a "no" response means compliance.

Exhibit 15: Site Security Map

IV-2



(Revised December 1986)

DAILY REPORT

Occidental Chemical Corporation

PAGE _____ OF _____

Security Officer	Payroll No.	Client	Client's Use

Date	Day of Week	Shift	Post
		To	

Relieved		Safety Equipment Inventoried by Guards		
		A Shift	B Shift	C Shift
Relieved by		Sets on Hand	Discrepancies Noted	
Keys Received By	Keys Pass To	Sets Still Out		

TIME	WHO WHAT WHERE WHEN WHY HOW REMARKS	TAPE

True Hours Worked

_____ Hours _____ Minutes

Security Officer's Signature

_____

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate at a minimum the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

FIGURE 5-2
SECURITY GUARD
DAILY REPORT FORM
Occidental Chemical Corporation
Tacoma, WA

Exhibit 16: Security Guard Daily Report Form

SECURITY GUARDS 03:15

APPENDIX A

OCC - TACOMA MANUFACTURING

TOUR REPORT

DATE OF TOURS_____ INITIALS OF TOUR GUARD_____ AM____ PM - ____GRAVE YARD___

CHECK POINTS ON EACH TOUR	GATE FOUND CLOSED AND LOCKED Tour Number				GATE FOUND OPEN AND RELOCK Tour Number				SECURITY AND/OR SAFETY ACTIONS OR OBSERVATIONS
GATES	1	2	3	4	1	2	3	4	
Administration									
Temp. Construction									
S.W. R.R.									
S.W. Truck									
S.E. Inactive									
Dock 2									
Dock 1									
Dock 1-Pass.									
R.R. - East TCE									
R.R. - Center TCE									
R. R. - West TCE									
Sub-Contractors									
Hooker Employee									
B-22 Gates									
H-25 Building									
Plant Engr's Bldg.									
B-21 Bldg. Front Door									
SAE Office									
Safety Building									
New E-4 Cell Building									
Laboratory									
Credit Union									
Maintenance Shop Office									
Construction Sites -									
Write in Name of Site									

The forms provided for performance of general facility inspections, specific inspections of regulated management units and emergency equipment, designate at a minimum the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e. outside contractor's name, etc.) of these inspection forms.

Exhibit 17: Security Guard Tour Report Form

FIGURE 5-3
SECURITY GUARD
TOUR REPORT FORM
Occidental Chemical Corporati
Tacoma, WA

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.D.1. (con't)	2.	Security				
ATT.3 Table 5-1, p. 5-14, 5-15		f. Are the gates listed below (locations identified on Exhibit 13) found to be in compliance with the status listed below:				

GATE NO.	STATUS	COMMENT
G-1	Locked	Open for entry/exit of trucks
G-2	Locked	Open for entry/exit of railcars
G-3	Locked	occasionally open for entry/exit of trucks
G-4	Open and unlocked	
G-5	Open	Locked if security guard is not at gate
G-6	Open	Locked if security guard not at main gate
G-6a	Locked	
G-7	Locked	Open for entry/exit of railcars
G-8	Locked	
G-9	Locked	
G-10	Locked	
G-11	Locked	Open for entry/exit of railcars and longshoreman access when salt ship docks/departs
G-12	Locked	
G-13	Locked	
G-14	Open	
G-15	Open	
G-16	Unlocked	
G-17	Unlocked	
G-17a	Unlocked	
G-18	Open	
G-19	Unlocked	
G-20	Locked	
emergency	Locked	Approximately 30 feet south of Gate G-12 in Plant Stores Building

ATT.3 p.5-(15-18) II.D.2.iii. II.D.2.v.

g. Are the warning signs identified below posted on the fence surrounding the railcar storage areas (TC-1, TC-2, and TC-3) at the locations indicated on Exhibits 15 and 18 at a height of 3-6 feet from ground surface:

Sign Location No. +Exhibit 15 ++Exhibit 18	Sign Wording
9 ++	• Private Property, No Trespassing • No Admittance, Apply at Office • Danger, Unauthorized Personnel Keep Out
10 ++	• Private Property, No Trespassing • No Admittance, Apply at Office • Danger, Unauthorized Personnel Keep Out
II.D.2.vi. 15 +	• Danger, Unauthorized Personnel Keep Out
II.D.2.vi. 16 +	• Danger, Unauthorized Personnel Keep Out

* INR - Information Not Reviewed

**Indicates that a "no" response means compliance.

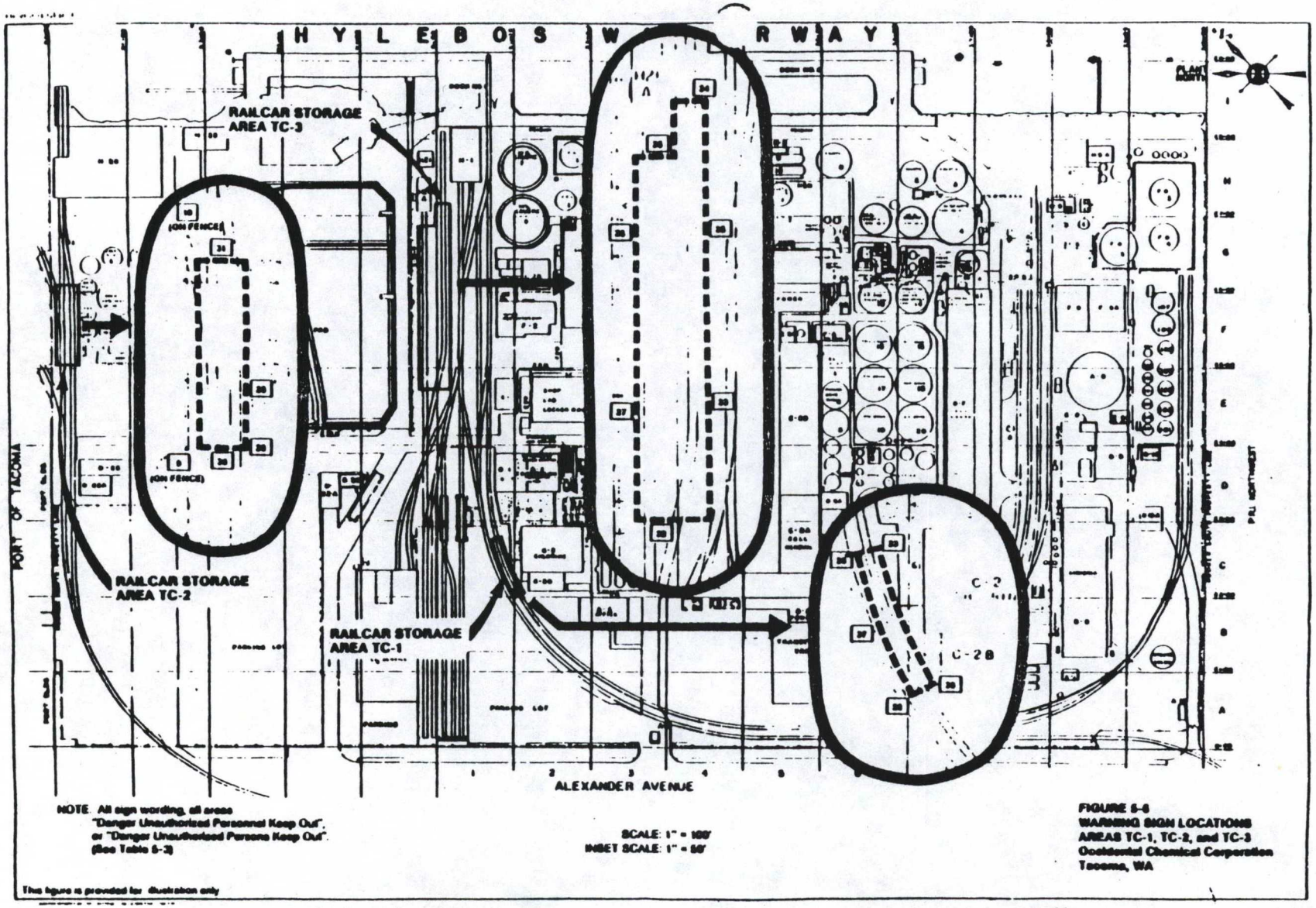


Exhibit 18: Warning Sign Locations: Areas TC-1, TC-2, TC-3

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.D.1. (con't)	2.	Security Sign Location No. (+Exhibit 15, ++Exhibit 18) — Sign Wording				
II.D.2.vi.		17 + • Danger, Unauthorized Personnel Keep Out				
II.D.2.vi.		18 + • Danger, Unauthorized Personnel Keep Out				
II.D.2.vi.		19 + • Danger, Unauthorized Personnel Keep Out				
II.D.2.vi.		20 + • Danger, Unauthorized Personnel Keep Out				
II.D.2.vi.		21 + • Danger, Unauthorized Personnel Keep Out				
II.D.2.iv.		22 ++ • Danger, Unauthorized Personnel Keep Out				
		23 ++ • Danger, Unauthorized Personnel Keep Out				
		25 ++ • (2 signs) Danger, Unauthorized Personnel Keep Out				
		26 ++ • (2 signs) Danger, Unauthorized Personnel Keep Out				
		27 ++ • (2 signs) Danger, Unauthorized Personnel Keep Out				
		28 ++ • Danger, Unauthorized Personnel Keep Out				
		29 ++ • Danger, Unauthorized Personnel Keep Out				
		30 ++ • Danger, Unauthorized Personnel Keep Out				
		31 ++ • Danger, Unauthorized Personnel Keep Out				
		32 ++ • Danger, Unauthorized Personnel Keep Out				
		33 ++ • Danger, Unauthorized Personnel Keep Out				
		34 ++ • Danger, Unauthorized Personnel Keep Out				
		35 ++ • Danger, Unauthorized Personnel Keep Out				
		36 ++ • Danger, Unauthorized Personnel Keep Out				
		37 ++ • Danger, Unauthorized Personnel Keep Out				
		38 ++ • Danger, Unauthorized Personnel Keep Out				
II.D.2.iii ATT. 3 p. 5-15.2		Note: Text "Danger, Unauthorized Personnel Keep Out" may be replaced by "Danger, Unauthorized Persons Keep Out"				
ATT. 3 p. 5-21		h. Are perimeter lighting fixtures (pole mounted or on buildings) located as illustrated on Exhibit 15 in place?				
ATT. 3 p. 5-21		i. If after dusk or before daylight, are perimeter lights described above operating?				

* INR - Information Not Reviewed

**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

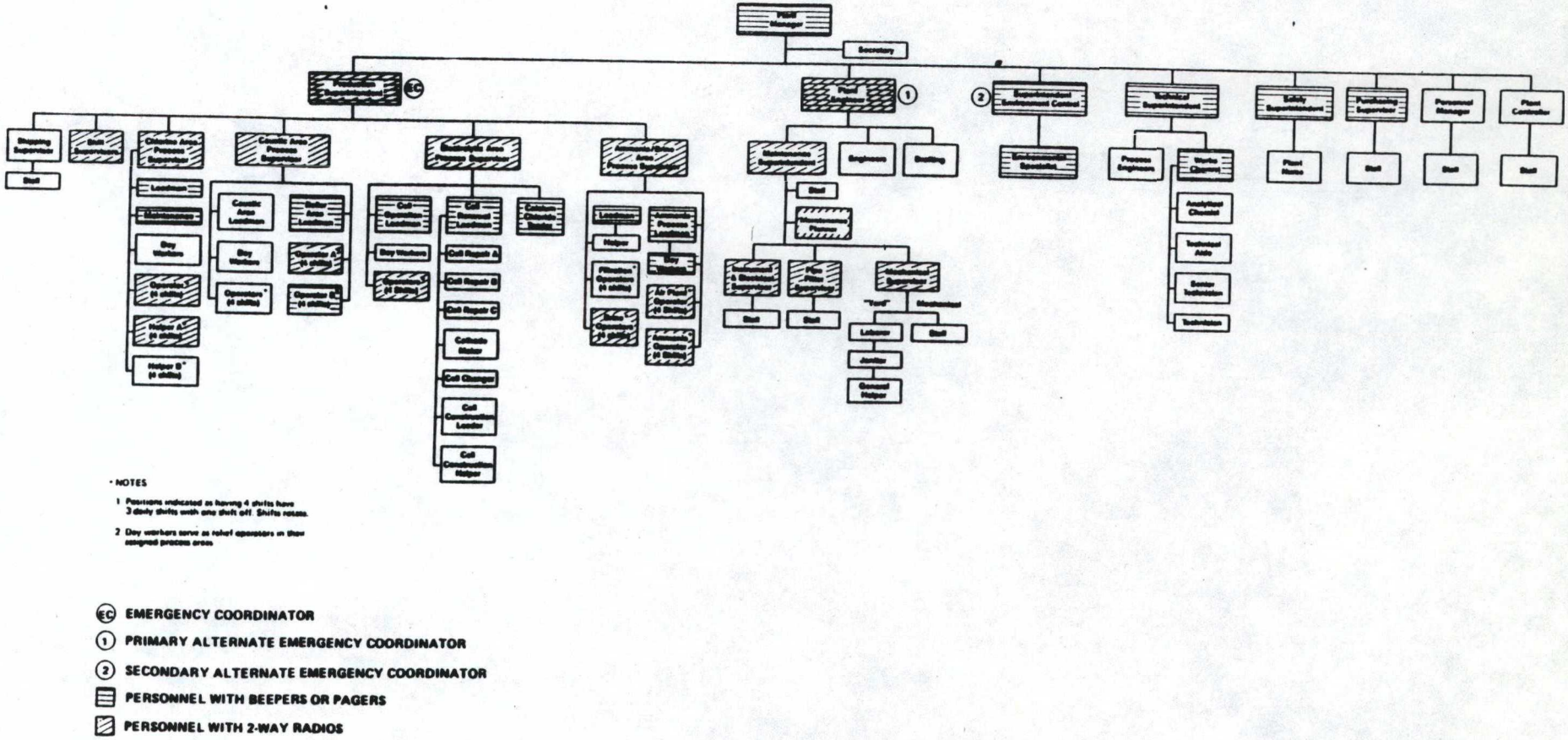
Inspector:_____

Location: Overall Facility

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.H. ATT. 7	3.	Contingency Plan				
ATT. 7 p. 8-31		a. Is there any indication that ignitable or explosive wastes are stored in any of the regulated waste management units?**				
		b. Are the following documents available on-site for use during implementation of the contingency plan:				
ATT. 7 p. 8-35		i. Test Methods for Evaluating Solid Waste, EPA SW-846?				
ATT. 7 p. 8-35		ii. Guide for Decontaminating Buildings, Structures, and Equipment at Superfund Sites, PEI Associates, Inc., March 1985?				
ATT. 7 p. 8-38		iii. A Method for Determining the Compatibility of Hazardous Waste (April 1980; EPA 600/2-80-076)?				
ATT. 7 p. 8-45,46		c. For any personnel encountered during inspection, are personnel carrying the portable communication devices indicated for the appropriate position illustrated on Exhibit 19?				
ATT. 7 p. 8-45 II.H.2.iv		d. Are all personnel observed performing duties involving dangerous waste in railcar container storage area TC-2 carrying a hand-held two-way radio?				
ATT. 7 p. 8-48,51		m. Are the following types of protective equipment provided at the locations identified on Exhibit 20:				
		i. Fire extinguishers?				
		ii. Automatic fire sprinklers?				
		iii. Fire hose houses?				
ATT. 7 p. 8-48		f. Do the hose houses identified above contain a wheeled hose caddy with a 50-foot hose, nozzles, wrenches, and gaskets?				
ATT. 7 p. 8-50,51		g. Are absorbent materials provided at the locations identified on Exhibit 21 as Hazard Storage Area?				
ATT. 7 p. 8-50, 52, 53		h. Is a Bobcat front-end loader available on-site to be used immediately to respond to spills? (The front-end loader is usually kept in the calcium chloride process area.)				
ATT.7 p. 8-52,53		i. Are shovels, drums, overpack containers, and an empty railcar available on-site to be used to respond to emergencies involving regulated waste management units?				
ATT. 7 p. 8-54						

* INR - Information Not Reviewed
**Indicates that a "no" response means compliance.



• NOTES

1 Positions indicated as having 4 shifts have 3 daily shifts with one shift off. Shifts rotate.

2 Day workers serve as relief operators in their assigned process areas

EC EMERGENCY COORDINATOR

1 PRIMARY ALTERNATE EMERGENCY COORDINATOR

2 SECONDARY ALTERNATE EMERGENCY COORDINATOR

PERSONNEL WITH BEEPERS OR PAGERS

PERSONNEL WITH 2-WAY RADIOS

FIGURE 8-4
PORTABLE COMMUNICATION DEVICES
ORGANIZATIONAL CHART
Occidental Chemical Corporation
Tacoma, WA

Exhibit 20: Fire Control System

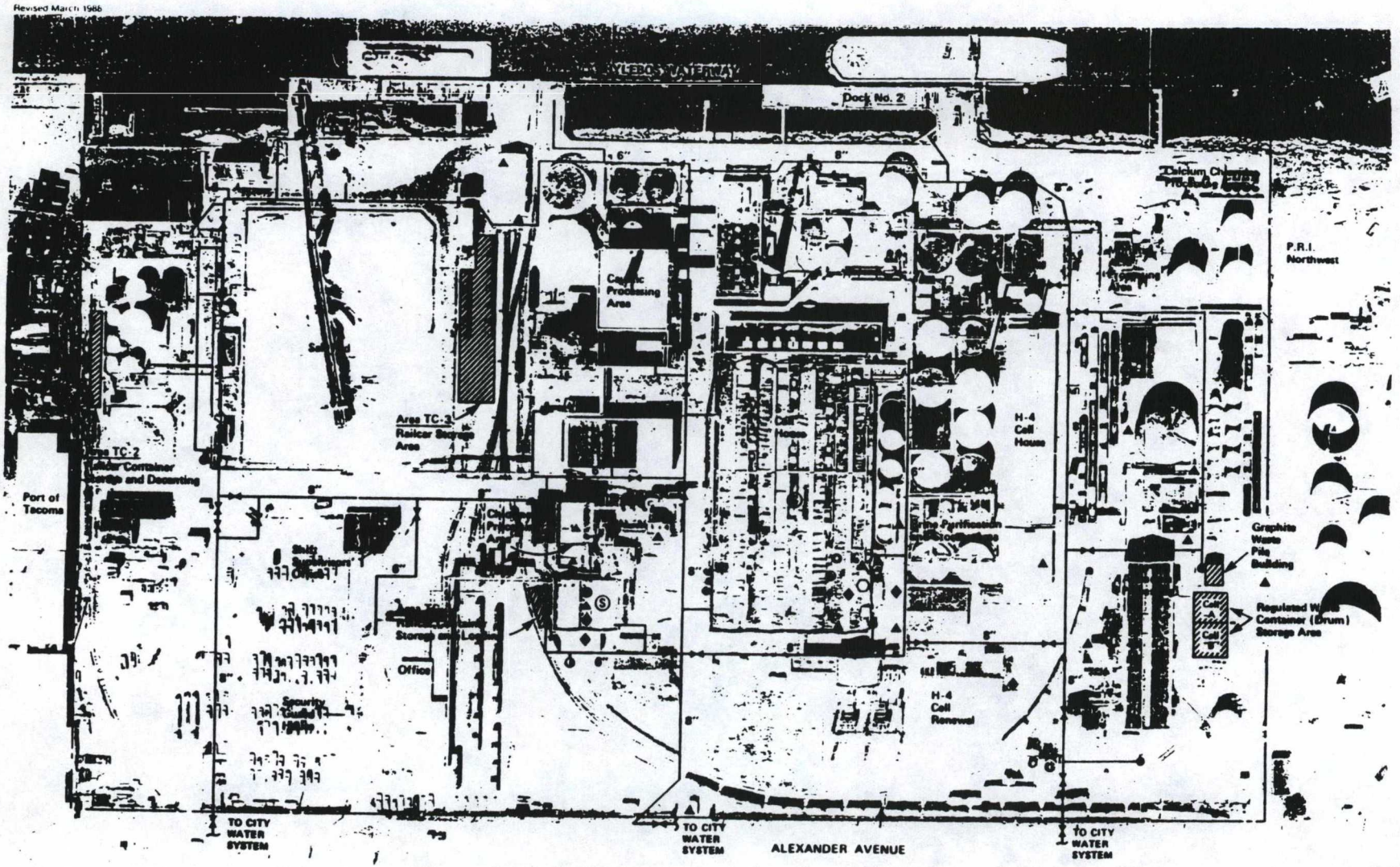


FIGURE 8-5
FIRE CONTROL SYSTEM
Occidental Chemical Corporation
Tacoma, WA

Figure 1

PROTECTIVE EQUIPMENT

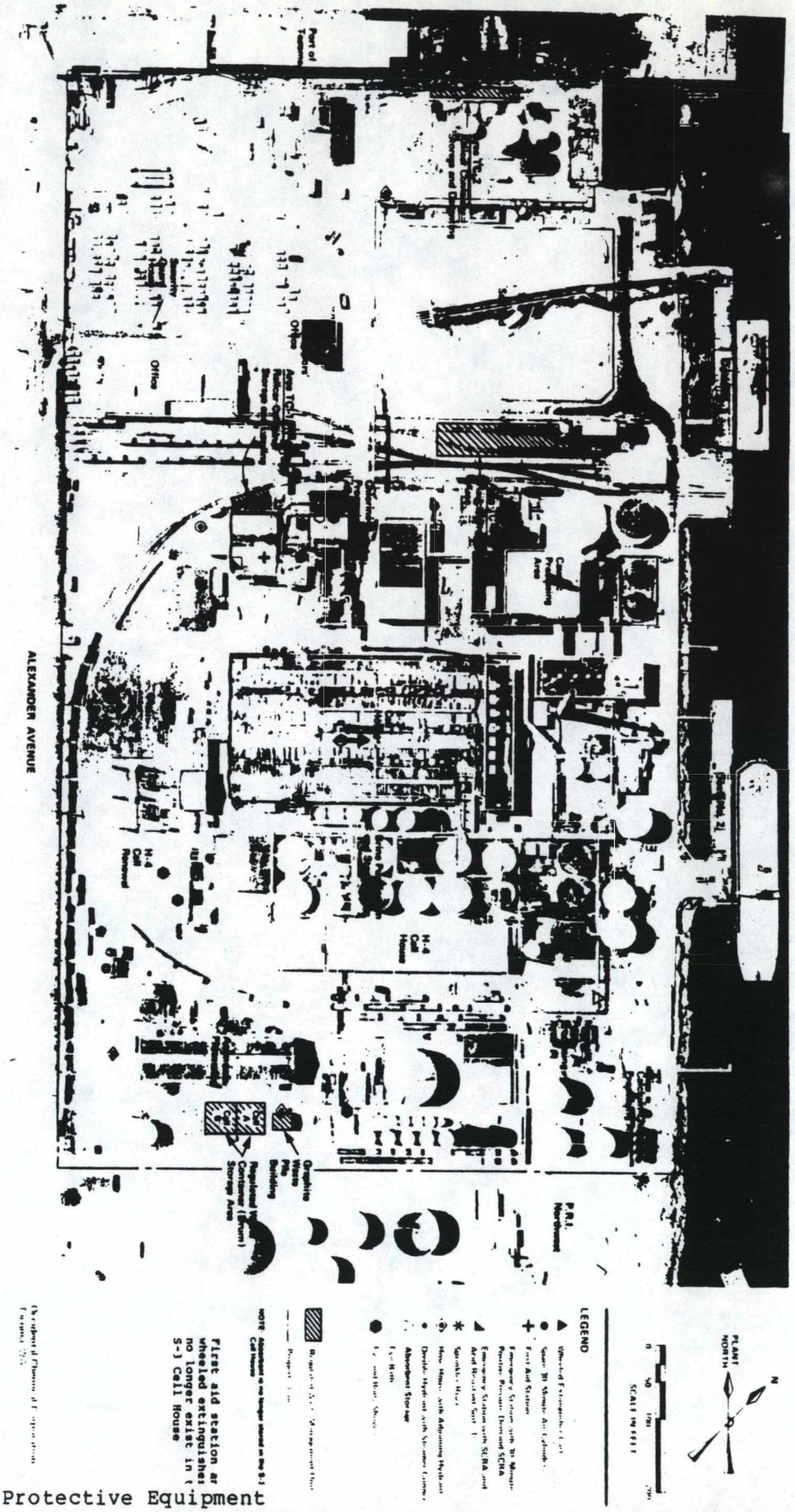


Exhibit 21: Protective Equipment

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTIONS I AND II: STANDARD CONDITIONS/GENERAL FACILITY CONDITIONS

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
II.H. (cont'd) ATT. 7 p. 8-41	3.	j. Are the following items available on-site: i. Telephones? ii. Hand-held portable radios? iii. Telephone-radio pagers? iv. Boiler house whistle? v. TIMAP? vi. Decontamination equipment? vii. Earthen materials to build temporary containment berms?				

* INR - Information Not Reviewed
**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: TC-1, TC-2, and TC-3

SECTION III: CONTAINER STORAGE UNITS

UNIT: RAILCAR CONTAINER STORAGE UNIT AREAS TC-1, TC-2, and TC-3 RAILCAR UNIT NOS. HOKX-2036 and HOKX-2049

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
III.A.1. III.B.1.	1.	The Permittee is permitted to store the following dangerous wastes in containers in the Railcar Container Storage Units: Waste Description — State/EPA Waste Number Chlorinated hydrocarbons/ sulfuric acid mixture — K073, D002 Decanted Chlorinated hydrocarbons — K073 Decanted sulfuric acid — D002, K073 Chlorinated hydrocarbons — K073 Are these the only wastes stored in this unit?				
III.E.2.	2.	The two Railcar Container Storage Units may store a maximum total combined volume of 20,000 gallons within the three designated storage locations (TC-1, TC-2 or TC-3) which are illustrated on Exhibit 6. Is the Permittee storing less than or equal to that amount within the three designated storage locations?				
III.A.1.	3.	Are more than two railcars (the maximum permitted) currently storing dangerous waste on-site?**				
III.C.	4.	Are the Railcar Container Storage Units in good condition?				
III.E.1. WAC 173-303-630(5)(a)	5.	Are the Railcar Container Storage Units kept closed during storage except when it is necessary to add or remove wastes?				
III.E.3. WAC 173-303-630(9)(c)	6.	Are the Railcar Container Storage Units managed in a manner such that ruptures or leaks will not occur?				

* INR - Information Not Reviewed
**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: TC-1, TC-2, and TC-3

SECTION III: CONTAINER STORAGE UNITS

UNIT: RAILCAR CONTAINER STORAGE UNIT AREAS TC-1, TC-2, and TC-3
RAILCAR UNIT NOS. HOKX-2036 and HOKX 2049

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
III.F.1. ATT. 9 p. 2-(47-50)	7.	Containment System The secondary containment system of the Railcar Container Storage Units is integral to the railcars. Each railcar's containment system is composed of welded steel plates over all openings on the underside of the railcar and a leak detection valve. a. Are there any cracks or other discontinuities at or near the surface of the welds around the leak detection valves?** b. Is the leak detection valve present? c. If yes, is it operative?				
III.G. ATT. 8 p. 11-7	8.	Closure a. The designated storage locations, TC-1, TC-2 and TC-3, for the Railcar Container Storage Units are expected to undergo closure in the years 1989, 1991 and 1989, respectively. Have any changes occurred in these locations which would change the expected dates of closure? b. If such changes have occurred, has the closure plan been amended? c. Has closure of TC-1 and TC-3 been initiated?				

* INR - Information Not Reviewed
**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Container (Drum) Storage Unit

SECTION III: CONTAINER STORAGE UNITS

UNIT: CONTAINER (DRUM) STORAGE UNIT

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
III.A.1. III.B.1.	1.	The facility is permitted to store the following dangerous wastes in containers in Cells A and B of the Container (Drum) Storage Unit Area which is illustrated on Exhibit 5: Waste Description — State/EPA Waste Number Solid Residues from Closure and/or Spill Cleanup of Chlorinated Hydrocarbons — K073 Spent Graphite Electrode Blades and Butts, Mastic, and Dross — D008 Contaminated Clothing — K073 Are these the only wastes stored at this unit?				
III.E.2. WAC 173-303-200	2.	The Container (Drum) Storage Unit Area may contain a maximum volume of 360 55-gallon (or other sized) drums or their volumetric equivalent (in gallons) in other sized containers. Is the Permittee storing no more than that amount at this unit? Note: This requirement applies regardless of whether the containers hold dangerous waste under this permit, dangerous waste under WAC 173-303-200, non-dangerous waste, or are empty.				
III.C.	3.	Container Condition a. Are the containers in good condition? b. If a container holding dangerous waste within the Container (Drum) Storage Unit Area is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, is the dangerous waste transferred from such a container to a container that is in good condition?				
III.D.1.	4.	Are containers in the Container (Drum) Storage Unit Area made or lined with materials which will not react with, and are otherwise compatible with the dangerous waste stored, so that the ability of the container to contain the waste is not impaired?				
III.D.2.	5.	During the inspection, was the Permittee observed placing dangerous wastes in an unwashed container which previously held incompatible waste or material?**				

* INR - Information Not Reviewed

**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Container (Drum) Storage Unit

SECTION III: CONTAINER STORAGE UNITS

UNIT: CONTAINER (DRUM) STORAGE UNIT

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
III.E.1. WAC 173-303-630(5)(a)	6.	Are all containers in the Container (Drum) Storage Unit Area kept closed during storage except when it is necessary to add or remove wastes?				
III.E.3. WAC 173-303-630(9)(c) ATT. 9. p. 2-24,27, 35	7.	Container Management a. Are all containers in the Container (Drum) Storage Unit Area opened, handled, or stored in a manner which would prevent the rupture of the containers? b. Are all drums and other portable containers stored in Cell A and Cell B of the Container (Drum) Storage Area placed on wooden pallets during the period of on-site storage? c. Is the maximum stacking height of drums (including pallets) two drums high? d. Are aisleways denoted by high-visibility, commercially available highway-type paints? e. Is an 18-inch aisleway maintained between every two rows of a single line of drums? f. Are drums, that are not stacked, maintained a minimum distance of one drum diameter (24 inches) from the curbing of the secondary containment systems? g. Are drums, that are stacked two high, maintained a minimum distance of one drum height from the curbing of the secondary containment systems? h. Is storm water run-on prevented from entering the container storage area by a continuous 6-inch-high concrete curb? i. Is any spilled or leaked waste visible in the containment system at the time of inspection?** j. Does the potential exist for overflow of the containment system?** k. Are all containerized wastes, designated as EHW, protected from incident precipitation and exposure by a heavy, clear plastic, fiberglass-reinforced cover?				
III.F.1. ATT. 9 p. 2-15, 25,26,28	8.	Container System The containment system in the Container (Drum) Storage Unit Area consists of a coated concrete floor, 6-inch continuous coated concrete curbing, and two coated catch basins.				

* INR - Information Not Reviewed

**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Container (Drum) Storage Unit

SECTION III: CONTAINER STORAGE UNITS

UNIT: CONTAINER (DRUM) STORAGE UNIT

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
III.F.1. (con't)	8.	Container System a. Are there any cracks or spalls in the coated concrete underlying the base of the Container (Drum) Storage Unit Area?** b. Is the spill containment system in the Container (Drum) Storage Area in good working order? c. Are the discharge gate valves (located on the 3-inch-diameter PVC drain lines immediately outside each cell) kept in the closed position, except when discharging accumulated precipitation from individual cells to the containment sump within the Graphite Waste Pile Building?				
III.F.2. ATT.9. p. 2-20	9.	a. Did the Permittee apply an impervious chemically resistant coating (either a polymorphic resin or an amine epoxy) to the concrete base, curbing, and catch basins? b. Is the coating in good condition?				
III.E.4. III.H.1. ATT. 9 pp. 2-38, 2-38.1, 2-38.2 WAC 173-303-630(9)	10.	Incompatible Waste a. Are all containerized wastes bearing the EPA Waste Code K073 stored in the east cell (Cell A) when stored in the Container (Drum) Storage Area? b. Are all wastes bearing the EPA Waste Code D002 (whether acidic or caustic in nature) stored in the west cell (Cell B) when stored in the Container (Drum) Storage Area? c. If the drums of acidic and caustic waste are located in the same row, is a minimum distance of one drum height (approximately 3 feet) provided between the drums? d. Are drums containing caustic D002 residues marked with white paint near the container label? e. Are drums containing acidic D002 residues marked with red paint near the container label?				

* INR - Information Not Reviewed
**Indicates that a "no" response means compliance.

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Container (Drum) Storage Unit

SECTION III: CONTAINER STORAGE UNITS

UNIT: CONTAINER (DRUM) STORAGE UNIT

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
III.E.4. III.H.1. (con't)	10.	Incompatible Waste				
II.H. ATT. 7 p. 8-39.1		f. Are wastes stored in the Drum Storage Area located in the appropriate cell as indicated below:				

ACCEPTABLE WASTES IN CELL A (east cell)

Waste No.	Waste Code
4(a)	K073
5	D008
6	K073
8(a)	K073
9	D008
11	DW
12	DW
16	D008
19(a)	DW/EHW
20	D008
22	DW
24,25	--

ACCEPTABLE WASTES IN CELL A (west cell)

Waste No.	Waste Code
5	D008
9	D008
11	DW
12	DW
13	D002
14	D002
15	D002
16	D008
19(a)	DW/EHW
20	D008
22	DW
24,25	--

ATT. 9 p. 2-33		g. Are liquids contained within the Container (Drum) Storage Area's catch basins discharged to the sump one cell at a time, to mitigate any potential for mixing potentially incompatible wastes?				
III.F.1 ATT.9 p. 2-33		h. Are liquids contained within the Container (Drum) Storage Area's catch basins tested in the following situations: i. Leaking drums are visually noted? ii. Leaking drums are not noted, but a sheen or visible film is observed in the catch basin suggesting that a leak from a deteriorated drum may have gone undetected during routine surveillance? iii. The Shift Supervisor, Environmental Specialist, or Superintendent of Environmental Control suspects that accumulated liquids may be contaminated?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Container (Drum) Storage Unit

SECTION III: CONTAINER STORAGE UNITS

UNIT: CONTAINER (DRUM) STORAGE UNIT

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
III.E.4. III.H.1. (con't) II.H.i. ATT. 7 p. 8-39	10.	Incompatible Waste i. If corrosive residues (soils or other solids) and halogenated hydrocarbon-contaminated residues (clothing, soils, other solid residues and dilute liquid wastes) are being stored in the drum storage area, are these wastes stored in separate containers and are they segregated in different cells or physically separated within an individual cell?				
II.H.11. ATT. 7 p. 8-56	11.	In the Container (Drum) Storage Area, are the aisle spacings indicated below and illustrated on Exhibit 5 maintained free to allow unobstructed movement: i. Minimum Interior Aisle Width: 18"? ii. Minimum Perimeter Aisle Width: 24"?				
III.G. ATT. 8 p. 11-4	12.	Closure a. The Container (Drum) Storage Area is expected to undergo closure in 1991. Have any changes occurred at this unit which would change its expected date of closure or the Closure Plan? (Refer to Section II, Closure Item c.) b. If such changes have occurred, has the Closure Plan been amended?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Waste Pile Building

SECTION IV: WASTE PILE STORAGE

UNIT: GRAPHITE WASTE PILE BUILDING

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
IV.A. IV.B.	1.	The facility is permitted to store the following dangerous wastes in the Graphite Waste Pile Building: Waste Description — State/EPA Waste Number Spent Graphite Electrode Blades and Butts, Mastic and Dross — D008 Are these the only wastes stored in this unit?				
IV.C.1. ATT. 10	2.	Does the Graphite Waste Pile Building appear to be in good condition (i.e. structurally sound, well-maintained)?				
IV.C.2. ATT. 9 p. 2-29,30 APP.2-D, p. 2-D- (1-3)	3.	a. Was the containment sump, located in the northeast corner of the Graphite Waste Pile Building, decommissioned and a new sump system installed by December 30, 1988? b. If yes, the following questions apply: i. Is the new sump located to the immediate north of the existing waste pile building? ii. Does the sump consist of a precast concrete manhole (and floor), with a single knockout equipped with a synthetic boot penetration for the inlet PVC piping? iii. Was the PVC drain line cut several feet upgradient of the sump (outside of the waste pile building)? iv. Do construction QC records indicate that the stub leading to the "decommissioned" sump was capped and sealed using standard PVC joint techniques? v. Do construction QC records indicate that the new PVC line installed to the new sump (from the cut several feet upgradient of the sump) provides sufficient slope for positive drainage into the sump? vi. Was the finished interior of the sump coated with the same chemical-resistant coating system that was applied in the Container (Drum) Storage Area? vii. Was a gasketed precast manhole cover (flat) installed over the sump? viii. Was a modified manhole cover or specially made steel cover installed over the manhole opening to allow for the suction piping and float control penetrations?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Waste Pile Building

SECTION IV: WASTE PILE STORAGE

UNIT: GRAPHITE WASTE PILE BUILDING

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
IV.C.2. (cont'd) ATT. 9 APP.2-D, p. 2-D-(1-3)	3.	ix. Was the existing sump pump relocated to the new sump? x. Were manual and float pump controls installed? xi. Was the float switch installed at or below elevation +11.86 feet NGVD (minimum floor elevation of the container storage area)?				
IV.C.3.	4.	Are liquids or materials containing free liquids stored in the Graphite Waste Pile?**				
IV.C.3.	5.	Are any wastes placed in the pile which could generate leachate as a result of decomposition or other reactions?**				
IV.E.1. ATT. 10 p. B-27 WAC 173-303-395(5)	6.	Are at least four waste shipments removed from the Graphite Waste Pile each year?				
IV.E.2. ATT. 10 p.B-27 WAC 173-303-395(5)	7.	Is the Graphite Waste Pile Building emptied completely at least once every five years?				
I.H.9. ATT. 7 p. 8-31	8.	If it is windy or rainy, are the dumpsters used for transporting wastes to the waste pile covered by a plexiglass plastic sheet during transport?				
I.H.10. ATT. 7 p. 8-31 II.H.2.iii	9.	If transport or loading of waste from the S-3 cell renewal area to the waste pile in dumpsters is occurring, are any wastes spilled?** If yes, was the spill cleaned up and was the material put back in the original container or an appropriate new container?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Waste Pile Building

SECTION IV: WASTE PILE STORAGE

UNIT: GRAPHITE WASTE PILE BUILDING

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
IV.G. ATT. 8 p. 11-7	10.	Closure a. The Graphite Waste Pile Building is expected to undergo closure in the year 1989. Have any changes occurred at this unit which would change its expected date of closure or the Closure Plan? b. If such changes have occurred, has the closure plan been amended? c. Has closure started? If yes, specify when _____.				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.A.1.i. Figure 2	1.	If after Date 2: Have six new wells been installed and developed as close as practicable to the locations designated on Exhibit 8?				
V.A.1.i. Table 4	2.	If after Date 2: Have the six new wells in item 1 above been designated as follows: i. 31-25? ii. 31-50? iii. 32-25? iv. 32-50? v. 33-25? vi. 33-50?				
V.A.1.ii.	3.	If after Date 3: Have (3) seep monitoring points been established and marked with a permanent easily identified reference point identified by a licensed surveyor in relation to an established National Geodetic-Vertical datum at the following locations: a. Seep No. 1 at facility's north dock area between old site of solvent plant and the Hylebos Waterway? b. Seep No. 2 just north of Seep No.1? c. Seep No. 3 at facility's south dock area?				
V.A.1.iii. V.A.1.vi. V.A.1.vii. V.A.1.viii. V.A.3.i. Table 5	4.	If after Date 17: Has the Permittee obtained an uncomposited sample from each well listed below in accordance with procedures in Appendix A of the permit (which is included as Attachment 1 of this checklist)? Well Numbers 1-25 _____ 1-45 _____ 1-100 _____ 1-175 _____ 2-25 _____ 2-50 _____ 2-100 _____ 2-166 _____ 3-25 _____ 3-50 _____ 3-100 _____ 3-175 _____ 4-25 _____ 4-45 _____ 4-83 _____ 4-115 _____ 4-175 _____ 5-15 _____ 5-25 _____ 5-50 _____ 5-100 _____ 6A-24.5 _____ 6A-50 _____ 6A-100 _____ 7-25 _____ 7-50B _____ 7-100 _____ 7-181 _____ 8-23 _____ 8-54 _____ 8-99 _____ 9-25 _____ 9-50 _____ 9-100 _____ 10-24 _____ 10-45 _____ 10-50 _____ 10-100 _____ 11-45 _____ 11-183 _____ 12-45 _____ 12-160 _____ 13-25 _____ 13-49 _____ 14-25 _____ 14-50 _____ 15-25 _____ 15-50 _____ 16-25 _____ 16-50 _____ 17-24 _____ 17-50 _____ 18-25 _____ 18-50 _____ 19-25 _____ 19-50 _____ 20-25 _____ 20-50 _____ 21-25 _____ 21-48 _____ 22-25 _____ 22-50 _____ 23-25 _____ 23-50 _____ 24-35 _____ 24-50 _____ 25-25 _____ 25-50 _____ 26-25 _____ 26-50 _____ 27-25 _____ 27-50 _____ 28-15 _____ 29-14 _____ 30-15 _____ 31-25 _____ 31-50 _____ 32-25 _____ 32-50 _____ 33-25 _____ 33-50 _____				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.A.1.iv.	5.	If after Date 18: Has the Permittee obtained a sample from each surface runoff location listed below and located as designated on Exhibit 8 in accordance with procedures in Appendix A of the permit (which is included as Attachment 1 of this checklist)? a. SS-1? b. SS-2? c. SS-3? d. SS-4? e. SS-5? f. SS-6?				
V.A.1.ii. V.A.1.v.	6.	If after Date 19: Has the Permittee obtained a sample from each seep monitoring point listed below, in accordance with procedures in Appendix A of the permit (which is included as Attachment 1 of this checklist)? a. Seep No. 1 at facility's north dock area between old site of solvent plant and the Hylebos Waterway? b. Seep No. 2 just north of Seep No. 1? c. Seep No. 3 at facility's south dock area?				
V.B. V.B.1. ATT. 12 ATT. 13	7.	**RCRA Facility Investigation II (hereafter called RFI-II) (Investigation in the Hylebos Waterway)** If after Date 30: Has the Permittee completed the RFI-II activities described below as specified in Attachments 12 and 13 of the OCC Permit: a. One surface sample collected from each of the stations listed below (locations illustrated on Exhibit 9): i. SS1? ii. SS2? iii. SS3? iv. SS4? v. SS5? vi. SS6? vii. SS7? viii. SS8? ix. SS9? b. One sediment sample collected from the Blair Waterway, at a location selected in consultation with EPA/DOE? c. One sediment core collected from each of the stations listed below (locations illustrated on Exhibit 9): i. C1? ii. C2? iii. C3? iv. C4? v. C5? vi. C6?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.B.1. (con't)	7.	d. Surface sediment samples analyzed for the following parameters: i. Priority pollutant volatiles? ii. Base, neutral, and acid extractibles? iii. Pesticides (including PCBs)? iv. Metals? v. Chlorinated butadiene groups? vi. The specific parameters listed on Exhibit 10? e. Sediment cores analyzed for the following parameters: i. The specific parameters listed on Exhibit 10? ii. The general parameters listed on Exhibit 10?				
V.C.		**Pre-Corrective Action Monitoring Period Program**				
V.C.1.ii.	8.	If after Date 37 (Commencement of Pre-Corrective Action Groundwater Monitoring Program): Has the Permittee obtained (or begun to obtain) water level elevation measurements from each monitoring well listed on Exhibit 22 with a designated water elevation measurement frequency within 30 minutes of low and high tides and within seven days prior to any purging or sampling events? (Measurements are not restricted to the same tide cycle or day.)				
V.C.1.ii.	9.	If after Date 37 but before Date 38: Has the Permittee obtained water level elevation measurements quarterly since Date 37 for each monitoring well listed on Exhibit 22 with a designated water elevation measurement frequency, within 30 minutes of low and high tides and within seven days prior to any purging or sampling events? (Measurements are not restricted to the same tide cycle or day.)				
V.C.1.iii.	10.	If after Date 37 (Commencement of Pre-Corrective Action Groundwater Monitoring Program): Has the Permittee obtained (or is the Permittee in the process of obtaining) the first groundwater samples from each monitoring well with a designated water quality monitoring frequency listed on Exhibit 22?				
V.C.1.iv.	11.	If after Date 37 but before Date 84: Has the Permittee obtained (or is the Permittee in the process of obtaining) groundwater samples quarterly since Date 37 for each monitoring well with a designated water quality monitoring frequency listed on Exhibit 22?				

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Table 7

PRE-CORRECTIVE ACTION MONITORING PROGRAM

Well Numbers	Water Quality Monitoring Frequency	Water Level Elevation Measurement Frequency
1-25		quarterly
1-45		quarterly
1-100		quarterly
2-25	annually	quarterly
2-50	annually	quarterly
2-100	annually	quarterly
5-15	annually	quarterly
5-25	annually	quarterly
5-50	annually	quarterly
5-100	annually	quarterly
7-25		quarterly
7-50B		quarterly
7-100		quarterly
8-23	annually	quarterly
8-54	annually	quarterly
8-99	annually	
10-24		quarterly
10-45		quarterly
10-50		quarterly
10-100		quarterly
11-45	semi-annually	
11-183	semi-annually	
12-45	quarterly	
12-160	quarterly	
13-25		quarterly
13-49		quarterly
20-25		quarterly
20-50		quarterly
21-25		quarterly
21-48		quarterly
22-25		quarterly
22-50		quarterly
25-25	annually	quarterly
25-50	annually	quarterly
27-25	semiannually	quarterly
27-50	semiannually	quarterly
31-25	quarterly	quarterly
31-50	quarterly	quarterly
32-25	quarterly	quarterly
32-50	quarterly	quarterly
33-25	semiannually	quarterly
33-50	semiannually	quarterly

Exhibit 22: Pre-Corrective Action Monitoring Program

FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.C.1.v.	12.	<u>If after Date 37 but before Date 84</u>: Has the Permittee analyzed all samples obtained as described above for the parameters listed below in accordance with the procedures designated in Appendix A of the OCC permit (which is included as Attachment 1 of this checklist)? a. Methylene Chloride? b. 1,2-Trans-dichloroethylene? c. Trichloroethylene? d. 1,1,2,2-Tetrachloroethane? e. Tetrachloroethylene? f. Carbon Tetrachloride? g. 1,1-Dichloroethylene? h. Chloroform? i. 1,1,2-Trichloroethane? j. Vinyl Chloride?				
V.C.1.viii. V.C.1.viii. V.C.1.viii.	13.	<u>If there is or has been any indication that a monitoring well must be replaced for any reason during the Pre-Corrective Action Monitoring Program</u>; a. Was the well replaced within 90 days of the defective well being taken out of service? b. Was a replacement monitoring well installed as close as practicable to the well being replaced? c. Was the replacement well installed using the following procedures: i. Casing pulled? ii. Well redrilled? iii. Well grouted to the land surface using a tremie pipe? iv. Grout used was a 4-5% Bentonite cement?				
V.C.1.xi.	14.	<u>If after February 14, 1989</u>: Has the Permittee closed all polyvinyl chloride pipe monitoring well installations?				
V.C.1.xi.	15.	Were any wells closed as discussed above closed by overdrilling the installation, removing the well and grouting to the land surface using a tremie pipe and a 4-5% Bentonite grout?				
V.C.1.ix.	16.	Has the sampling program been significantly hindered or delayed due to monitoring wells not maintained in good working order or by repairs not made in a timely manner?**				
V.C.1.ix.	17.	Have any sampling events been significantly hindered or delayed due to a lack of replacement parts or repair equipment?**				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	INR*
V.D.7.	18.	If after Date 70: Has the Permittee implemented any modifications to the groundwater extraction system's design, construction, operation, maintenance, and repair plan as designated in the approved final report under permit condition V.D.6.?				
V.D.8.	19.	If after Date 73: Has the Permittee completed designs for one of the groundwater treatment systems listed on Table 11 and conceptually described in Attachment 14 of the OCC permit with adequate capacity and flexibility to treat the effluent from the groundwater extraction system and to meet all applicable local, State, and Federal regulatory requirements for permitting the groundwater treatment system and its discharges?				
V.D.8. Table 3 Items 21, 23, 24, 25	20.	If a treatment system was installed to treat discharges from the pump test(s) conducted under permit condition V.D.2.; and If the treatment system described above can be retrofitted to treat the effluent from the groundwater extraction system and to meet all applicable local, State, and Federal regulatory requirements for permitting the groundwater treatment system and its discharges; and If after Date 75: Has the Permittee completed retrofitting of the groundwater treatment system (that was installed to treat discharges from the pump test(s) conducted under permit condition V.D.2.) based on the design described above?				
V.D.8. Table 3 Items 21, 23, 24, 25	21.	If no treatment system was installed to treat discharges from the pump test(s) conducted under permit condition V.D.2.; or If the treatment system described above can not be retrofitted to treat the effluent from the groundwater extraction system and to meet all applicable local, State, and Federal regulatory requirements for permitting the groundwater treatment system and its discharges; and If after Date 77: Has the Permittee completed construction of the Groundwater Treatment System based on the design described in item 64, above?				
V.D.9.	22.	If after Date 83: Are the Groundwater Extraction System and the Groundwater Treatment System fully operational?				
V.E.3.	23.	If after Date 84: Has the Permittee installed the Corrective Action Groundwater Monitoring System in accordance with the approved Groundwater Corrective Action Monitoring Plan?				
V.F.2.ii.	24.	If after Date 94: Has the Permittee obtained samples from all monitoring points in accordance with the procedures in Appendix A of the OCC permit (which is included as Attachment A of this checklist)?				

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FACILITY NAME: Occidental Chemical Corporation

Inspection Date:_____

Inspector:_____

Location: Overall Facility

SECTION V: CORRECTIVE ACTION FOR PAST PRACTICES

Permit Condition Number	No.	Inspection Item	Y	N	N/A	N/A
V.F.2.iii.	25.	+<u>If after Date 94; and</u> <u>If the Permittee has obtained these samples described above</u>: Has the Permittee analyzed (or is the Permittee in the process of analyzing) the samples for the parameters on Exhibit 12 in accordance with the procedures in Appendix 1 of the OCC permit (which is included as Attachment A of this checklist)?				
V.F.2.iv.	26.	+<u>If after Date 94; and</u> <u>If substitution of Table 9 for Table 8 of the OCC permit has not been approved in accordance with permit condition V.F.3.</u>: Has the Permittee analyzed (or is the Permittee in the process of analyzing) the samples for the parameter vinyl chloride in accordance with the procedures in Appendix A of the OCC permit (which is included as Attachment A of this checklist) except that EPA SW-846 Method 8010 is to be used in place of EPA SW-846 Method 8240?				
V.F.2.v.	27.	+<u>If after Date 94; and</u> a. <u>If the Permittee has completed the analysis described above</u>: Has the Permittee performed (or is the Permittee in the process of performing) an evaluation of the analytical data obtained using all applicable Agency and Department guidelines and standards for protection of health and the environment current at the time of the evaluation to determine Clean-Up Standards for each parameter? b. If all Applicable Agency and Department Guidelines and Standards do not address all of the parameters, has the Permittee determined Clean-Up Standards for the parameter(s) not addressed by either performing a toxicity bioassay or setting the Clean-Up Standards at the parameter(s) analytical method's practical quantitation limit (PQL)?				

+ Due dates not specified in the OCC permit.

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ATTACHMENT 1

APPENDIX A

SITE SPECIFIC QUALITY ASSURANCE REQUIREMENTS

FOR

OCCIDENTAL CHEMICAL CORPORATION

TACOMA PLANT SITE

TACOMA, WASHINGTON

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1.0 PROJECT DESCRIPTION

1.1 INTRODUCTION

This document presents guidelines and specifications which describe the Quality Assurance requirements for the water analyses of groundwater and surfacewater under the Corrective Action for Past Practices Program specified in Part V of the Joint Permit for Dangerous Waste for the Occidental Chemical Corporation, Tacoma Plant Site. This document also presents under Sections 6, 9, 10, and 11 procedures which will be followed for sediment sampling and analysis under the Corrective Action for Past Practices Program specified in Part V of the Joint Permit for Dangerous Waste for the Occidental Chemical Corporation, Tacoma Plant Site.

1.2 PROGRAM DESCRIPTION

The plan of work included in the Corrective Action for Past Practices Program is divided into four major phases. The first phase requires the sampling and analyses of groundwater (including groundwater seeps) and surfacewater samples for Methylene Chloride, 1,2-Trans-dichloroethylene, Trichloroethylene, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Carbon Tetrachloride, 1,1-Dichloroethylene, Chloroform, 1,1,2-Trichloroethane, and Vinyl Chloride. In addition, two groundwater samples will be analyzed for polychlorinated biphenyls and one groundwater sample will also be analyzed for pyridine. The stabilization indicator parameters pH, specific conductivity, and temperature will also be determined for groundwater sampling.

The second phase will include sampling and analysis of groundwater for Methylene Chloride, 1,2-Trans-dichloroethylene, Trichloroethylene, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Carbon Tetrachloride, 1,1-Dichloroethylene, Chloroform, 1,1,2-Trichloroethane, and Vinyl Chloride during the timeframe prior to commencement of the Corrective Action for Contaminated Groundwater Program. This phase will also include obtaining water level elevation measurements from certain groundwater monitoring wells. The stabilization indicator parameters pH, specific conductivity, and temperature will also be determined for groundwater sampling.

The third phrase will consist of sampling and analysis of groundwater for Methylene Chloride, 1,2-Trans-dichloroethylene, Trichloroethylene, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Carbon Tetrachloride, 1,1-Dichloroethylene, Chloroform, 1,1,2-Trichloroethane, and Vinyl Chloride to support a pump test. The stabilization indicator parameters pH, specific conductivity, and temperature will also be determined for groundwater sampling.

The fourth phase will consist of sampling and analysis of groundwater for Methylene Chloride, 1,2-Trans-dichloroethylene, Trichloroethylene, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Carbon Tetrachloride, 1,1-Dichloroethylene, Chloroform, 1,1,2-Trichloroethane, and Vinyl Chloride during the timeframe when the Corrective Action for Contaminated

Groundwater Program is in operation and for a timeframe after which it has ceased operation. The fourth phase will also include sampling and analysis for Acetone, Arsenic, Barium, Bis(2-Ethylhexyl)phthalate, Carbon Disulfide, Copper, 1,1-Dichloroethane, 1,2-Dichloroethane, Hexachlorobutadiene, Hexachloroethane, Methyl ethyl Ketone, Pentachloroethane, Phenol, 2-Picoline, Pyridine, Styrene, 1,1,1-Trichloroethane, Vanadium, and Zinc. This phase will also include obtaining water level elevation measurements from certain groundwater monitoring wells. The stabilization indicator parameters pH, specific conductivity, and temperature will also be determined for groundwater sampling.

2.0 PROJECT ORGANIZATION AND RESPONSIBILITY

2.1 PROJECT ORGANIZATION

The project organization is presented on Figure 1.

2.2 DEFINITION OF RESPONSIBILITIES

2.2.1
Analytical Program Manager (APM) is responsible for the following:

- Selecting and reviewing all sampling and analytical protocols required for measuring and monitoring.
- Selecting analytical laboratories.
- Directing the activities of internal and external analytical laboratories used for the project.
- Reviewing all QA/QC results with the QA Officer.
- Has overall responsibility for management of the analytical program and the validity of all data.

2.2.2
Analytical Program Coordinator (APC) is responsible for the following:

- Assists the Analytical Program Manager.
- Implements the analytical program.
- Responsible for the day to day operation of the program.
- Responsible for the analytical data base.

2.2.3
Analytical Quality Assurance Officer (QAO) is responsible for the following:

- Reviewing and advising on all aspects of QA/QC.
- Assisting the APM in specifying QA/QC procedures to be used.
- Making QC evaluations to assist in reviewing QA/QC procedures, and if problems are detected making recommendations to the APM, APC, and ALC to rectify the problem.

- Evaluating and recommending corrections to sample custody procedures.
- Informing the Project Manager that appropriate QA/QC procedures have been established and are being implemented by the proper personnel.
- Evaluating and recommending corrections in sampling and/or analytical techniques.

2.2.4
The Analytical Laboratory Coordinator (ALC) is responsible for the following:

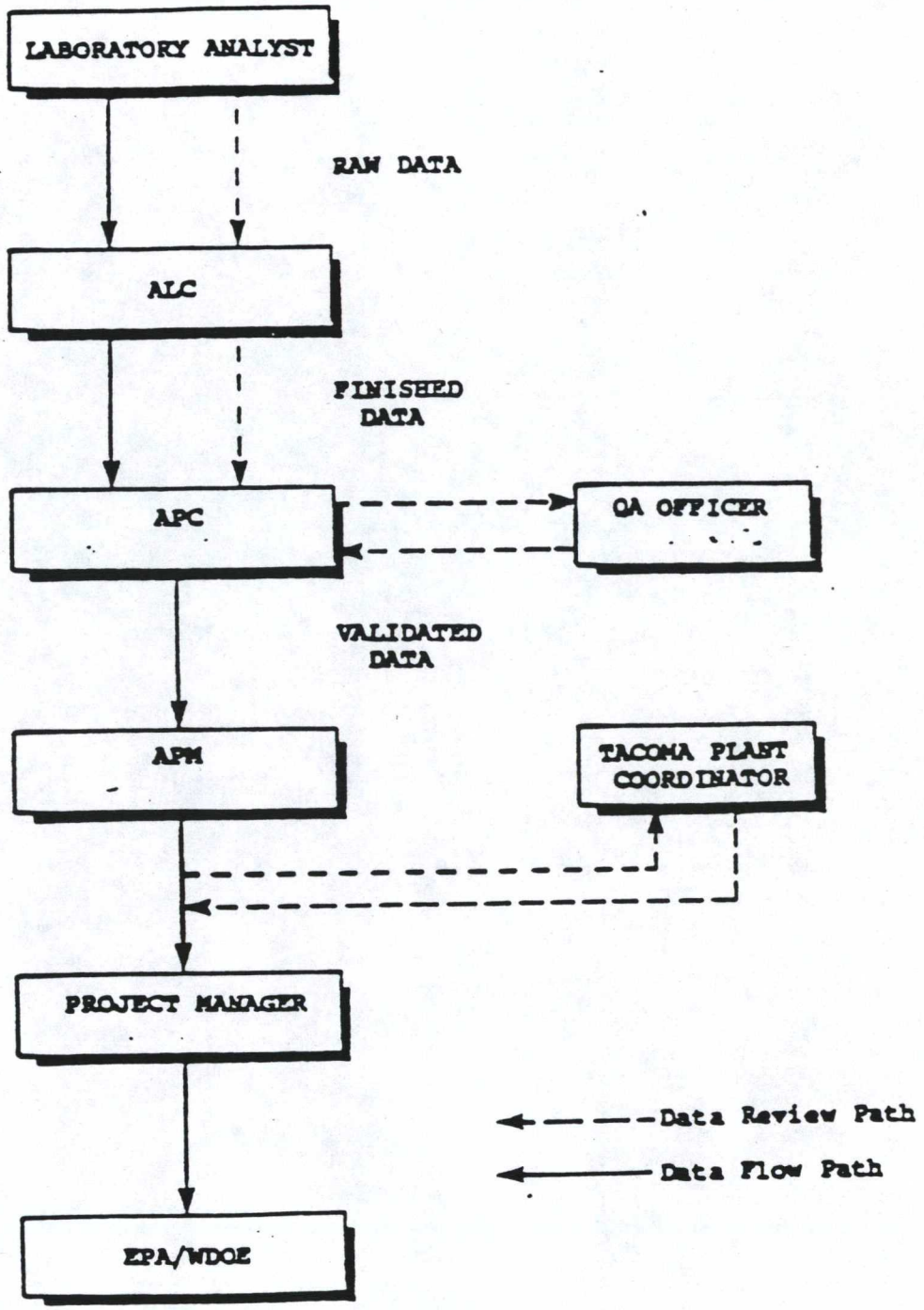
- Responsible for each laboratory's analytical activities.
- Training and qualifying personnel in specified laboratory QC and analytical procedures prior to receiving samples.
- Informing the APC and/or QAO if any review of data quality appears to warrant repeat analysis of some or all samples.
- Receiving samples from the field and verifying that incoming samples correspond to the packing list or chain of custody sheet.
- Maintaining records of all incoming samples; tracking those samples through subsequent processing, analysis, and ultimately appropriate disposal of those samples at the conclusion of the project.
- Preparing quality control samples for analysis prior to and during the program.
- Preparing QC and sample data for review by the APC and QAO.
- Review of raw data with laboratory chemists against calibration and QC records.
- Approval of finished data.
- Preparing QC and sample data for transmission to the APC.

2.2.5
The Sampling Coordinator is responsible for the following:

- Coordinating field activities and delivery of samples to the analytical laboratory.
- Determining appropriate sampling equipment and sample containers to minimize contamination.
- Training and qualifying field personnel in sampling procedures and field analytical procedures prior to sampling.
- Ensuring that samples are collected, labeled, preserved, stored, transported and, when necessary, filtered as specified in the procedures or protocols.
- Checking that all sample documentation is correct, and transmitting that information with the samples to the analytical laboratory and the APC.
- Verifying that field analytical QC procedures are being followed as specified in the QA/QC protocol and preparing QC data for review by the APC and QAO.
- Participating in field analytical/sampling quality audits with the APC and QAO.

FIGURE 1

PROJECT ORGANIZATION



3.0 QUALITY ASSURANCE OBJECTIVES

3.1 INTRODUCTION

All measurements made will be representative of media and conditions. All data will be reported in consistent units to allow comparison with similar data. Data quality objectives will be based on prior knowledge (referenced) for each measurement parameter/method. Quality assurance samples, replicates, spikes, and standards calibration will be used to validate the method in the laboratory. Changes in methods will be reported with reasons and QA results suitable to support the change and will include, when appropriate, verification or validation data.

3.2 SUMMARY OF PRECISION, ACCURACY AND COMPLETENESS OBJECTIVES

Analyses of the groundwater and surface water samples will utilize the EPA methods listed in Table I. At least 10 percent of all samples analyzed will be replicates used to assess the precision of all analyses and 10 percent will be spiked samples used to assess the accuracy of all analyses. Completeness objectives will be those as listed in Tables I and the limits for precision and accuracy will be those as referenced in Table I.

3.3 REPRESENTATIVENESS

3.3.1
Sampling will be performed so as to best obtain a true representation of the environment.

3.3.2
Proper preservation of samples shall be employed in order to assure integrity of the sample for analysis and the analysis will be representative of the sample.

3.3.3
Sampling site selection and sampling procedures and equipment are addressed in 4.1 and 4.2.

3.4 DOCUMENTATION OF ANALYSES

Full documentation of the analyses performed will be kept in bound laboratory notebooks, including traceability of standards. These notebooks will be available for inspection by the EPA/WDOE at the laboratories.

Table I

Summary of Analysis of Groundwater and Surface Water Samples

rameter	Analytical[1] Method Reference	Sample Preservation	Holding Time	Sample Size & Container	Precision/Accuracy (% Recovery ± rel std/dev)	Completeness
etone	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
rbon Disulfide	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
rbon Tetrachloride	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
loroform	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
,1-Dichloroethane	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
,2-Dichloroethane	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
,1-Dichloroethylene	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
ethyl Ethyl Ketone	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
ethylene Chloride	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
entachloroethane	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
yridene	8240 EPA SW-846 Direct Injection	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
tyrene	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
,1,2,2-Tetrachloroethane	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
etrachloroethylene	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
,2-Trans-dichloroethylene	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
,1,1-Trichloroethane	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
,1,2-Trichloroethane	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
Trichloroethylene	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
Vinyl Chloride	8240 EPA SW-846	Cool 4°C	7 days	3 X 40 ml glass vials	per method	95%
PCB's	8080 or 8270 EPA SW-846	Cool 4°C	7 days extraction 30 days analysis	2 X 1 L amber glass	per method	95%
Bis(2-Ethylhexyl)phthalate	8270 EPA SW-846	Cool 4°C	7 days extraction 30 days analysis	2 X 1 L amber glass	per method	95%
Hexachlorobutadiene	8270 EPA SW-846	Cool 4°C	7 days extraction 30 days analysis	2 X 1 L amber glass	per method	95%

1. EPA SW-846 - "Test Methods for Evaluating Solid Wastes", EPA Publication SW-846, Third Edition.

Table I (Cont.)

Summary of Analysis of Groundwater and Surface Water Samples

Parameter	Analytical[1] Method Reference	Sample Preservation	Holding Time	Sample Size & Container	Precision/Accuracy (% Recovery ± rel std/dev)	Completeness
Hexachloroethane	8270 EPA SW-846	Cool 4°C	7 days extraction 30 days analysis	2 X 1 L amber glass	per method	95%
Phenol	8270 EPA SW-846	Cool 4°C	7 days extraction 30 days analysis	2 X 1 L amber glass	per method	95%
2-Picoline	8270 EPA SW-846	Cool 4°C	7 days extraction 30 days analysis	2 X 1 L amber glass	per method	95%
Arsenic	7060 EPA SW-846	Nitric Acid to pH <2	28 days	1 L cleaned plastic	per method	95%
Barium	6010 EPA SW-846	Nitric Acid to pH <2	28 days	1 L cleaned plastic	per method	95%
Copper	6010 EPA SW-846	Nitric Acid to pH <2	28 days	1 L cleaned plastic	per method	95%
Vanadium	6010 EPA SW-846	Nitric Acid to ph <2	28 days	1 L cleaned plastic	per method	95%
Zinc	6010 EPA SW-846	Nitric Acid to pH <2	28 days	1 L cleaned plastic	per method	95%
pH*	9040 EPA SW-846	- - -	- - -	- - -	per method	95%
Specific Conductance*	9040 EPA SW-846	- - -	- - -	- - -	per method	95%

1. EPA SW-846 - "Test Methods for Evaluating Solid Wastes", EPA Publication SW-846, Third Edition.
*Parameters analyzed in the field.

4.0 SAMPLING PROCEDURES

4.1 COLLECTION OF GROUNDWATER SAMPLES

After well development and before taking of the first water sample for analysis, the well will be purged a maximum of ten well volumes or until pH, conductivity, and temperature stabilize or until the well is dry. Purging will be done and water samples will be collected from the monitoring wells using stainless steel or teflon bailers or positive displacement pumps equipped with teflon tubing. During purging for the collection of the second and subsequent water samples for analysis, each well will be purged a minimum of four to a maximum of ten well volumes. The number of well volumes to be purged will be determined based on the rate of stabilization recorded during purging for the first water sampling.

Water samples will also be collected from designated groundwater seeps into the Hylebos Waterway to coincide with negative tide periods. The seep samples will be collected using silanized glass containers. The contents of the container will be used to fill sample bottles appropriate for the specific analysis required.

4.2.1 MEASUREMENT OF WATER LEVEL ELEVATION

Each well shall have a permanent easily identified reference point on the well casing from which its water level elevation is taken. The water-level measure point will be marked on the well and described in the field notebook. The reference points shall be established by a licensed surveyor in relation to an established National Geodetic Vertical Datum. An electric tape water-level measuring device sufficiently sensitive so that a measurement to 0.01 feet can be obtained reliably shall be used to determine the depth to groundwater. The water level probe and wire will be cleaned in accordance with 4.3 before use each day and between wells.

4.2 COLLECTION OF SURFACE RUNOFF SAMPLES

Runoff samples will be collected during the first hour of a rainfall event. A second set of samples will be collected after four hours or at the end of the rainfall event.

4.2.1 Surface Runoff Sampling Stations

Each surface runoff sampling station will be equipped with a large silanized glass container. The station will be installed so that runoff will flow into the container. The container will be retrieved during the first hour and after four hours or at the end of a rainfall event and the contents used to fill sample bottles appropriate for the specific analysis required.

4.3 CLEANING OF SAMPLES AND SAMPLE HANDLING TOOLS

Prior to collection of each water sample, the bailer or pump used to purge the well and collect the sample will be cleaned according to the following protocol:

a) Disassemble equipment, if necessary.
b) Water wash to remove all visible matter.
c) Hexane rinse.
d) Methanol or acetone rinse.
e) Distilled/deionized water rinse.

4.4 CONTAINERS

4.4.1
Two options for container preparation are available to the analyst. Each batch of sample containers and caps may be demonstrated to be clean by analyzing a distilled water wash of a representative number of containers for all parameters or the containers may be washed by the procedure below. The "bottle blank" value obtained for any analytical parameter will not be used to correct the final analytical value for any sample. If container and cap cleaning is to be performed, the protocol below will be followed:

4.4.1.1
Containers for the organic compounds will be cleaned as follows:

- Caustic detergent wash
- Tap water rinse
- Distilled water rinse
- Hexane/acetone rinse
- Distilled water rinse
- Oven dry at 250°C for 1 hour - Cap with clean septum

4.4.1.2
Septum and Teflon Cap Liners

Teflon lined silastic septa and Teflon film cap liners will be cleaned as follows

- Caustic detergent wash
- Tap water rinse
- Distilled water rinse
- Oven dry at 110°C for 1 hour - Store in zip-lock polyethylene bags or glass jars

4.4.1.3
Containers for inorganic compounds will be cleaned as follows:

- Detergent wash
- Tap water rinse
- Rinse with 1:1 nitric acid
- Tap water rinse
- Rinse with 1:1 hydrochloric acid - Tap water rinse
- Deionized distilled water rinse - Air dry for 2 hours.

4.4.2
Sample containers for samples undergoing organic analyses will be made from glass and will have either a teflon-lined cap or a thin sheet of Teflon as a cap liner. The containers will be of a screw cap nature and have a capacity of 1 liter, except those for samples undergoing analysis for volatile compounds. These containers will be 40 ml Hypo-Vials, and will have a Teflon lined cap. Separate containers will be used for each type of analysis, e.g., volatiles, semi-volatiles.

4.4.3
All samples undergoing inorganic analyses will be collected and placed in plastic containers having a volume of 1 liter. All containers for samples undergoing metals analyses will have 5 ml ultrapure nitric acid (concentrated) added to them prior to sample collection, and must also have been prewashed with detergent, acid, and deionized water.

4.5 GENERAL SAMPLE HANDLING

4.5.1
All samples, unless otherwise specified, will be stored in the dark in a refrigerator at 4°C or on wet ice.

4.5.2
For transit, all samples will be packed with ice or ice substitute in damage resistant coolers.

4.5.3
One in every ten samples will be collected in duplicate.

4.5.4
Samples will be retained and stored in accordance with 4.5.1 for 30 days after results are reported to OCC. Extracts will be stored for six months. The samples and extracts will be placed in a drum properly identified and then shipped to a permitted Treatment, Storage, and Disposal Facility for disposal.

4.6 SPECIFIC SAMPLE HANDLING

4.6.1
All samples of water taken for the analysis of volatile organics will be filled to overflow, i.e., no air space.

4.6.2
The pH for samples undergoing inorganic analyses must be adjusted to <2. This implies that additional nitric acid may have to be added to the sample after it is placed into the container that previously had nitric acid added to it (see 4.4.3).

6.0 SAMPLE CUSTODY

6.1 RECORD KEEPING

All records will be kept in bound books. Only one code number will be used for each individual sample. This code number will be used from sample acquisition through final data tabulation. That particular code will be used for ease of identification. Detailed notebooks are to be kept by all project personnel.

6.2 CHAIN-OF-CUSTODY

Chain-of-Custody procedures must be strictly adhered to in order to assure the integrity of the samples throughout the project. Sample custody procedures will include written records for each sample throughout the following operations: storage of sample containers prior to field sampling and transportation of sample containers to the sampling site; sample collection; storage after collection; during transportation to the laboratory; storage at the laboratory prior to analysis sample archival; and final sample disposal. The chain-of-custody procedures will assure the following:

- Proper labelling of sample bottles.
- Proper storage of labelled samples in a secured area.
- Disposition of each sample to an analyst or technician.
- Use of each sample in each bottle in a testing procedure appropriate to the intended purpose of the sample.
- The Chain-of-Custody Form will be completed.

Field Chain-of-Custody Record Forms will be utilized. Once a sample is received at the laboratory, a Laboratory Sample Analysis Request form, or similar, will be filled out by the laboratory and this will be used as the Chain-of-Custody Record and the Laboratory Sample Analysis Request form. A copy of the Laboratory Sample Analysis Form will be forwarded to the APC and the ALC.

6.3 IDENTIFICATION OF SAMPLE

6.3.1
Each sample will have a label affixed to its container. The label will include the following information:

- Sample Identification Number or Code.
- Name of Collector.
- Date and Time of Collection.
- Place of Collection.

6.3.2
Each sample will have a gummed paper seal affixed to its container in such a way as to detect if the sample has been opened. This seal will include the same information as 6.3.1.

7.0 ANALYTICAL PROCEDURES

7.1 INTRODUCTION

The analytical procedures are presented below. The laboratory will validate these procedures using ongoing QC data. If the laboratory selected for a particular analysis has a history of proficiency in performing the assigned type of analysis, no validation of the procedure will be required.

Their continued proficiency will be demonstrated by the QA/QC data generated during the program. When a type of analysis new to the laboratory is to be performed, a method validation will be required. This requires each parameter to run at three (3) different concentrations (3X, 5X, 10X MDL) on five different days."

7.2 ANALYSES OF GROUNDWATER AND SURFACE WATER SAMPLES

The samples will be analyzed for the parameters listed on Table I.

7.2.1
Volatile Compounds will be analyzed using Purge and Trap, Method 5030, and GC/MS Method for Volatile Organics, Method 8240, described in Test Methods for Evaluating Solid Waste, EPA Publication SW-846, Third Edition. Helium will be the gas used to purge a 5 ml aliquot of water sample. All samples for volatiles will be analyzed within 7 days of sampling.

7.2.3
Extractable Acid/Base/Neutral and Pesticide Compounds will follow Methods 3510 and 8270, Separatory Funnel Liquid-Liquid Extraction and GC/MS Method for Semivolatile Organics, respectively, from Test Methods for Evaluating Solid Waste, EPA Publication SW-846, Third Edition. The sample will be extracted three times with methylene chloride, once with no pH adjustment made, once with pH adjusted to >11, and once with pH adjusted to <2. The first two aliquots are combined together for drying and concentrating. The third aliquot is treated individually. Immediately prior to GC/MS analysis, the extracts will be combined. The option to use a continuous extractor instead of using separatory funnels will be available.

7.2.4
PCB analysis will be based on methodology from Test Methods for Evaluating Solid Waste, EPA Publication SW-846, Third Edition, Method 8080, Organochlorine Pesticides and PCB's, or Method 8250, Gas Chromatography/Mass Spectrometry for Semivolatile Organics. Packed Column Technique will be followed. The extract will be dried, concentrated to 1 ml and injected into a gas chromatograph equipped with both a 63Ni electron capture detector and a flame photometric detector in the phosphorous mode. All samples for PCBs will be extracted within seven (7) days of sample collection.

7.2.5
The analyses of Metals and Organometallic Compounds will be performed according to the methods published by the EPA in Test Methods for Evaluating Solid Waste, EPA Publication SW-846, Third Edition. The inorganic analyses may be summarized as follows: arsenic analyzed by furnace atomic adsorption; barium, copper, lead, vanadium, and zinc are determined by Inductively Coupled Plasma.

7.3 ADDITIONAL PROCEDURES

7.3.1
The pH of samples will be determined using Test Methods for Evaluating Solid Waste, EPA Publication SW-846, Third Edition, Method 9040. The objectives for accuracy and precision will be those given for the method.

7.3.2
The specific conductance of water will be determined using Test Methods for Evaluating Solid Waste, EPA Publication SW-846, Third Edition, Method 9050. The objectives for accuracy and precision will be those given for the method.

8.0 DATA REDUCTION VALIDATION AND REPORTING (REFER TO FIGURE 2)

8.1 DATA REDUCTION
All raw data will be examined, evaluated, and then reduced to final results. The final results will be expressed in units of measurement that permit comparison with data generated from similar projects and analyses.

8.2 DATA VALIDATION
All raw data shall be reviewed and validated against calibration and QC records to ensure the reliability of all data and that the data is in compliance with the QA/QC objectives defined in Section 3.0. The flow for review of raw data is indicated by the broken arrows in Figure 2. Any data determined to be invalid shall not be reported to the Project Manager. However, the fact that data has been invalidated and the reasons for the invalidation will be reported.

8.3 REPORTING

All valid data shall be reported as indicated by the flow scheme of solid arrows in Figure 2. The reporting format will include at least the following:

- Sample Identification Number or Code.
- Location of Sample Origin.
- Date Sampled.
- Date Analyzed.

8.4 LONG TERM STORAGE OF DATA

All data generated will be included in written reports of the program. The storage of these reports will be the responsibility of the APC. Long term storage will be achieved using computer data management. All analytical and QA/QC data will be entered into a computer file. This file will be protected from possible changes, deletions or additions. The storage of all laboratory notes and chromatograms in accessible forms will be the responsibility of the ALC.

9.0 INTERNAL QUALITY CONTROL CHECKS

The QC checks will be used to assess the quality of both the sampling procedures and of the sample analyses used for this project.

9.1 GENERAL PROCEDURES

The following QC checks will be run for all analyses to be performed in this project.

9.1.1 Blank Samples

Blank samples are to be analyzed to assess possible contamination problems.

9.1.1.1
Field Blanks are to be sent to the site and exposed to field and sampling conditions and analyzed to assess possible field and/or shipping contamination. They will also serve as Trip Blanks. Field blanks will be collected at a minimum frequency of 10 percent of the total number of samples to be analyzed. To prepare field blanks for water samples, empty sample container will be filled in the field with distilled/deionized organic free water. To prepare field blanks for sediment samples, sample containers used for organic compounds analyses will be filled with deionized water and sample containers for metal analyses remain empty.

9.1.1.2
Method Blanks are to be prepared in the laboratory and analyzed to assess possible laboratory contamination.

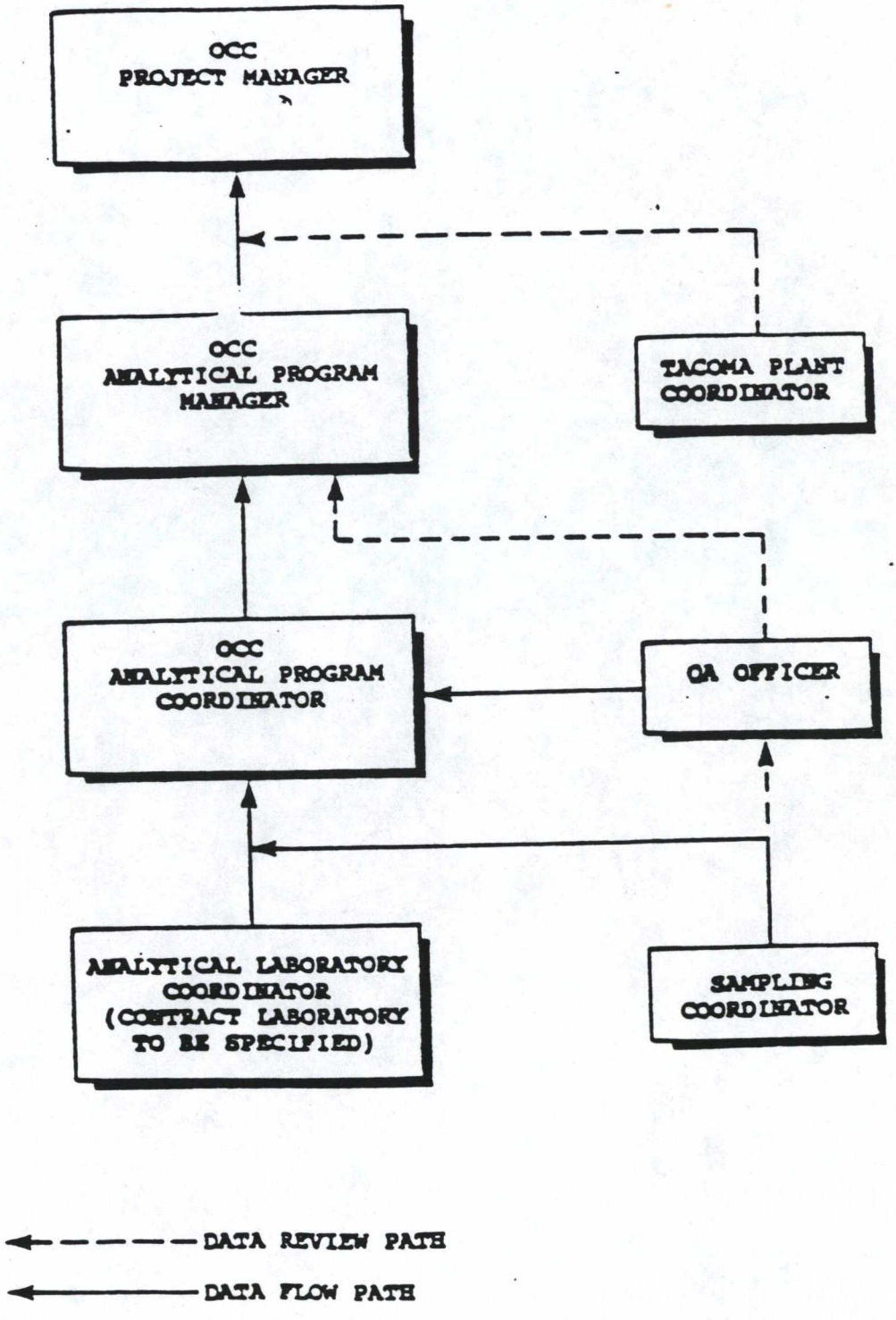
9.1.1.3
Reagent and Solvent Blanks are prepared in the laboratory and analyzed to determine background of reagents and solvents used in the routine analysis.

9.1.2 Replicate Samples

These samples are analyzed in order to establish control and assess the precision of an analysis and/or of sampling. At least 10 percent of the total number of samples to be analyzed will be replicated.

FIGURE 2

DATA FLOW SCHEME



9.1.2.1
Field Replicates are samples obtained in order to assess the adequacy of overall sampling and handling procedures.

9.1.2.2
Laboratory Replicates are prepared in the laboratory and are analyzed to assess the reproducibility of the laboratory procedures used.

9.1.3 Spiked Samples
Spiked samples are spiked with one or more selected compounds prior to extraction. The recovery of the compound(s) is used as a measure of the accuracy of the sample preparation and analysis procedures. At least 10 percent of the total number of samples analyzed will also be spiked samples. In addition, blank spikes will also be prepared and analyzed.

10.0 PREVENTIVE MAINTENANCE

Major hardware maintenance will be that as suggested by the hardware manufacturer. However, maintenance such as column replacement, detector and source cleaning, filament replacement, etc., is to be performed as needed when either instrument performance declines or QC check criteria are not achieved.

11.0 CORRECTIVE ACTION

Corrective action will be taken when conditions are identified that are adversely affecting data quality or exhibit potential to adversely affect data quality. The corrective action taken may be immediate as in repairing an instrument malfunction, or may be a long term plan of action in order to eliminate recurring problems. Corrective action may be initiated as the result of instrument problems. Corrective action may include but not be limited to the following:

- Reclamation of instruments with fresh standards.
- Replacement of solvents and/or reagents that yield unacceptable blank values.
- Additional training and/or reassignment of personnel.

12.0 QUALITY ASSURANCE REPORTS TO MANAGEMENT

On a predetermined schedule, the QAO will meet with the APM to review QC data summaries, documentation, and other aspects of the analytical performance. The assessment of the QA/QC data shall be reported to the Project Manager. This report will highlight any areas that appear to require remedial action and will also present proposed plans to rectify the apparent problems. Included in this report shall be any results of earlier corrective action that had been initiated.

ATTACHMENT 2

'sed December 1986)

MONTHLY AIR ' ' INSPECTION

Location	Date	Tank Pressure	Regulator Pressure	Inspector	Status	Comments
A. CERP Room						
Unit 1-1						
Unit 1-2						
B. Shifters Truck						
C. Maintenance Shop						
Unit 3-1						
Unit 3-2						
Unit 3-3						
Unit 3-4						
D. Chlorine Control Room						
Unit 8-1						
Unit 8-2						
E. Caustic Control Room						
F. Boiler House						
Unit 4						
Unit 5						
G. Chlorine Barge Scale House						
H. Ammonia Plant						
Unit 10-1						
Unit 10-2						
I. East Brine Control Room						
J. S-3 Cell House						
Unit 7-1						

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

FIGURE 6-3
MONTHLY AIR PACK INSPECTION FORM
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 3

(Revised December 1986)

ABC Fire Equipment Company

2148 SOUTH JEFFERSON TACOMA, WASHINGTON 98402 (206) 383-3804

Fire Extinguishers – Supplies
Dry Chemical Powders
Halon
Fire Hoses
First Aid Kits
Smoke Detectors

FIRE EXTINGUISHER INSPECTION REPORT

FIRM NAME ______________________________

ADDRESS ______________________________

LOCATION ______________________________

FREQUENCY ______________________________

SERVICE MAN ______________________________

* Denotes visual inspect

R-Recharge
T-Test
RE-Repair
NE-New Equipment

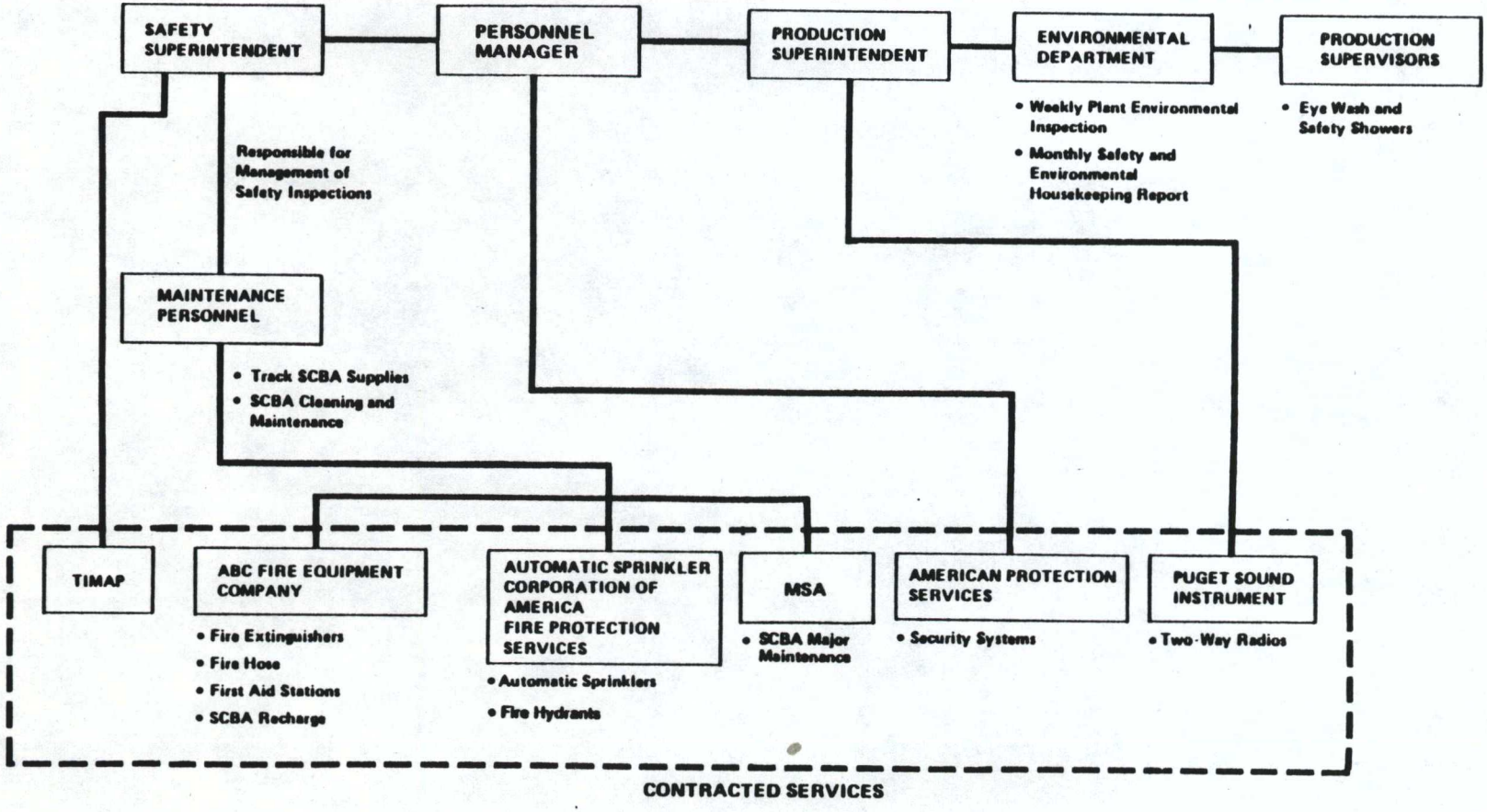
MONTHS REMARKS

TYPE	LOCATION	1	2	3	4	5	6	7	8	9	10	11	12

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as

FIGURE 6-4
FIRE EXTINGUISHER INSPECTION REPORT FORM
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 4



NOTE: OCC reserves the right to change contractors for inspection services or to have OCC personnel conduct inspections.

FIGURE 6-1
GENERAL INSPECTION PROGRAM ORGANIZATIONAL CHART
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 5

REVISED APRIL 1987

FIRE HOSE TEST - SURVEY REPORT

HOSE STATION-LOCATION	TYPE	NO.	VISUAL FAIL	HYDRO FAIL	HYDRO PASS	HOSE FITTINGS	DEFICIENCIES - COMMENTS

CUSTOMER _____

ADDRESS _____

_____

PHONE _____

TEST DATE | MONTH | DAY | YEAR |

SERVICE BY

ABC FIRE EQUIPMENT
383 - 3804
2148 SOUTH JEFFERSON - TACOMA, WASH. 98402

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

FIGURE 6-5.1
ANNUAL FIRE HOSE INSPECTION FORM
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 6

(Revised December 1986)

FORM 10-20
SHEET 1 of 2

(PRESS FIRMLY YOU ARE MAKING 5 COPIES)

REPORT OF INSPECTION

BY "AUTOMATIC" SPRINKLER CORPORATION OF AMERICA FIRE PROTECTION SERVICES

A FIGGIE INTERNATIONAL COMPANY

Inspection Report No. 745

Inspection Contract No 63-5761

Conferred With Graham

Bureau File No. ....

REPORT TO Occidental Chem. Corp. BUILDING OR LOCATION 23015

STREET 605 Alexander TECHNICIAN Ron Johnson

CITY & STATE Tacoma, WA PHONE ____ DATE 30 MAY

Owner's Section (To be answered by owner or occupant)

A. Explain any occupancy hazard changes since the previous inspection. none

B. Describe fire protection modifications made since last inspection. none

C. Describe any fires since last inspection. none

D. When was the system piping last checked for stoppage, corrosion or foreign material? N/A

E. When was the dry-piping system last checked for proper pitch? N/A

F. Are dry valves adequately protected from freezing?

Inspector's Section (All responses reference current inspection)

	Yes	N.A.‡	No*
1. GENERAL			
a. Is the building occupied?	✓		
b. Are all systems in service?	✓		
c. Is there a minimum of 18 in. (457mm) clearance between the top of the storage and the sprinkler deflector?	✓		
d. In areas protected by wet system, does the building appear to be properly heated in all areas, including blind attics and perimeter areas, where accessible? Do all exterior openings appear to be protected against freezing?	✓		
e. Does the hand hose on the sprinkler system appear to be satisfactory?			
2. CONTROL VALVES (See Item 14)			
a. Are all sprinkler system control valves and all other valves in the appropriate open or closed position?	✓		
b. Are all control valves in the open position and locked, sealed or equipped with a tamper switch?	✓		
3. WATER SUPPLIES (See Item 15)			
a. Was a water flow test of main drain made at the sprinkler riser?	✓		
4. TANKS, PUMPS, FIRE DEPARTMENT CONNECTIONS			
a. Are fire pumps, gravity tanks, reservoirs and pressure tanks in good condition and properly maintained?		✓	
b. Are fire department connections in satisfactory condition, couplings free, caps in place, and check valves tight? Are they accessible and visible?	✓		
5. WET SYSTEMS (See Item 13)			
a. Are cold weather valves (O.S.&Y.) in the appropriate open or closed position?			
b. Have antifreeze system solutions been tested?			
c. Were the antifreeze test results satisfactory?			
6. DRY SYSTEMS (See Items 10 to 14)			
a. Is the dry valve in service?			
b. Are the air pressure and priming water level in accordance with the manufacturer's instructions?			
c. Has the operation of the air or nitrogen supply been tested? Is it in service?			
d. Were low points drained during this inspection?			
e. Did quick-opening devices operate satisfactorily?			
f. Did the dry valve trip properly during the trip pressure test?			
g. Did the heating equipment in the dry-pipe valve room operate at the time of inspection?			
7. SPECIAL SYSTEMS (See Item 16)			
a. Did the deluge or pre-action valves operate properly during testing?			
b. Did the heat-responsive devices operate properly during testing?			
c. Did the supervisory devices operate during testing?			
8. ALARMS			
a. Did water motor and gong test satisfactorily?	✓		
b. Did electric alarm test satisfactorily?			
c. Did supervisory alarm service test satisfactorily?			
9. SPRINKLERS			
a. Are all sprinklers free from corrosion, loading or obstruction to spray discharge?			
b. Are sprinklers over 50 years old, thus requiring sample testing?	✓		
c. Is stock of spare sprinklers available?	✓		
d. Does the interior condition of sprinkler system appear to be satisfactory?	✓		
e. Temperature. Are sprinklers of proper temperature ratings for their locations?	✓		

*Explain "No" Answers on Page 2 ‡Not applicable

This is Set 1 of 2 Inspection Report Forms. Your Inspection is not Complete Unless Both Set 1 and 2 are Filled Out

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e. outside contractor's name, etc.) of these inspection forms

FIGURE 6-6
AUTOMATIC SPRINKLER INSPECTION REPORT FORM
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 7

8 HR./DAILY

MOBILE SAFETY & MAINTENANCE INSPECTION

Date		Shift	
Unit No.		Hours	
	Engine Oil		Coolant
	Back Up Alarm		Fire Extinghisher
	Fan Belts		Hoses
	Tires		Safety Lights
	Fuel Level		Guages
	Brakes		Horn
	Steering		Controls
	Lights		Leaks
	Unusual Noise		Mirrors
	Obvious Damage		
NOTE DEFICIENCIES:			
INSPECTION COMPLETED BY:			

OCC Safety & Maintenance Inspection

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

FIGURE 6-7
MOBILE EQUIPMENT INSPECTION FORM
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 8

SECURITY GUARDS 03:15

APPENDIX A

OCC - TACOMA MANUFACTURING

TOUR REPORT

DATE OF TOURS_____ INITIALS OF TOUR GUARD_____ AM____ PM ~ GRAVE YARD___

CHECK POINTS ON EACH TOUR	GATE FOUND CLOSED AND LOCKED Tour Number				GATE FOUND OPEN AND RELOCK Tour Number				SECURITY AND/OR SAFETY ACTIONS OR OBSERVATIONS
GATES	1	2	3	4	1	2	3	4	
Administration									
Temp. Construction									
S.W. R.R.									
S.W. Truck									
S.E. Inactive									
Dock 2									
Dock 1									
Dock 1-Pass.									
R.R. - East TCE									
R.R. - Center TCE									
R. R. - West TCE									
Sub-Contractors									
Hooker Employee									
B-22 Gates									
H-25 Building									
Plant Engr's Bldg.									
B-21 Bldg. Front Door									
SAE Office									
Safety Building									
New H-4 Cell Building									
Laboratory									
Credit Union									
Maintenance Shop Office									
Construction Sites -									
Write in Name of Site									

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate at a minimum the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e. outside contractor's name, etc.) of these inspection forms.

FIGURE 5-3
SECURITY GUARD
TOUR REPORT FORM
Occidental Chemical Corporati
Tacoma, WA

(Revised December 1986)

DATE: _____

SHIFT SUPERVISOR'S ENVIRONMENTAL REPORT

NAME

SHIFT	7 - 3	3 - 11	11 - 7
TIME			
VISUAL INSPECTION			
Stripper Effluent Line - No Leaks			
Residue Stg-South of Salt Pad - No T/C Leaks			
Residue T/C Stg & Transfer System-TCE No T/C Leaks or Spills			
Residue Receiving T/C (Chlorine Dept) No Line or T/C Leaks or Spills			
Asbestos Drum Storage Area - No Drum Leaks, Lids On, No Standing Water			
Graphite Stub Stg Area - Tarp Closed & Bottom Outside Berm - No Graphite Outside Stg			

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

REMARKS _____

FIGURE 6-8
SHIFT SUPERVISOR'S
ENVIRONMENTAL REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 10

(Revised December 1986)

OCCIDENTAL CHEMICAL CORPORATION
TACOMA PLANT

WEEKLY CONTAINER (DRUM) STORAGE AREA INSPECTION REPORT

Inspector's Name/Title: _____
Storage Area Inspection A(east) B(west)
(circle which storage area(s) inspected)
Date and Time of Inspection _____

Weather Conditions Temperature _____ Wind _____
General _____

INSPECTION CHECKLIST

Inspection Procedures	Status: Normal	Problem	Comments
Drums			
Check condition of drums:			
Deteriorated, damaged, corroded, rusted, or leaking drums			
Drums damaged or leaking due to expansion of contents			
Containers closed or sealed			
Label identifies contents and accumulation date			
Drum containing EHW are covered			
Potential incompatibles: No K073 drums in Cell B. No D002 drums in Cell A. D002 acid and caustic drums physically separated in Cell B.			
Arrangement of Drums			
Check the physical arrangement of the drums:			
Adequate aisle space between containers to properly inspect or remove			
Containers on pallet			
Containers stacked not more than two high			
Containment Area			
Check the concrete floor coating for cracks, crumbling, or flaking			
Check containment curb for holes, cracks, gaps, and crumbling			

The forms provided for performance of general facility inspections, specific inspections of regulated management units and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (e.g. outside contractor's name, etc.) of these inspection forms.

FIGURE 6-9
WEEKLY CONTAINER (DRUM) STORAGE AREA INSPECTION REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 11

(Revised December 1986)

OCCIDENTAL CHEMICAL CORPORATION
TACOMA PLANT

CONTAINER (DRUM) STORAGE AREA SHIPPING AND POSTSHIPMENT REPORT

Date: _____ By: _____
Time Loading Commenced: _____ Weather Conditions:
Time Completed: _____ Temperature: _____ Wind: _____
General: _____

Empty Weight of Trucks: Truck #1 _____ Final Weight _____
Truck #2 _____ _____
Manifest Numbers: Truck #1 _____
Truck #2 _____

General Observations
Transporter's Name: _____
Drums Removed From (cell area): _____
Is Loading Area Wet or Dry? _____
Trucks Properly Secured Prior to Leaving Site? Yes ___ No ___
If no, describe: _____
_____
Any Material Spilled During Loading? Yes ___ No ___
If yes, describe: _____
_____
Remedial Action Taken: _____
_____
_____

Postloading Inspection of Container Storage Area
All Waste Removed During Shipment? Yes ___ No ___
Any Liquids or Stains on Floor? Yes ___ No ___
If yes, describe: _____
_____
Remedial Action Taken: _____
_____

Describe Condition of Floor, Catch Basins, and Concrete Curbing (note any cracks, stains, or other apparent deterioration):
_____
_____

Any Remedial Action Required? Yes ___ No ___
If yes, describe: _____
_____
Who contacted? _____
Date to be completed? _____

Other Comments
_____
_____

Signature and Date: _____

Note: Attach copy of manifest(s)

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside con-

FIGURE 6-10
CONTAINER (DRUM) STORAGE AREA SHIPPING AND POSTSHIPMENT REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 12

(Revised December 1986)

OCCIDENTAL CHEMICAL CORPORATION
TACOMA PLANT

WEEKLY RAILCAR CONTAINER INSPECTION REPORT

Inspector's Name/Title: _____
Date and Time of Inspection: _____
Railcar Number: _____
Estimated Quantity of Liquid in Railcar Container: _____

INSPECTION CHECKLIST

Inspection Procedures	Status: Normal	Problem	Comments
Check discharge line from reboiler to receiving car for leaks			
Check inlet piping (top of railcar) for leaks, corrosion, or general deterioration			
Open leak detection valve (bottom of railcar container) to check for leaks in primary containment shell			
Visually check all welds on steel plates on underside of railcar's secondary containment shell for leaks, corrosion, or general deterioration			
Check railcar container vent for blockage, corrosion, or general deterioration			
Visually check general condition of railcar container for evidence of corrosion or deterioration			

Remedial Actions Necessary? YES NO

If yes, describe remedial actions needed: _____

_____

_____

_____

Who Contacted: _____

Date remedial work completed: _____

Signature: _____

Date: _____

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

FIGURE 6-11
WEEKLY RAILCAR CONTAINER INSPECTION REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 13

(Revised December 1986)

OCCIDENTAL CHEMICAL CORPORATION
TACOMA PLANT

CHLORINATED HYDROCARBON RAILCAR CONTAINER TRANSFER REPORT

Inspector's Name/Title: _____

Date and Time Transfer Operation Began: _____

Railcar Container Number: _____

Method of Offsite Shipment (shipping car, tanker, etc.):

_____

Manifest Number(s): _____

Name of Transporter(s): _____

General Observations

Any Materials Spilled During Transfer Operation or Piping Disconnection? Yes__ No__

If yes, describe: _____

_____

Remedial Action Taken: _____

_____

Evidence of Leakage From Interior Container (open leak detection valve on bottom of car)? Yes ___ No ___

If yes, describe: _____

_____

Remedial Action Taken: _____

_____

Other Comments (attach additional comments if needed)

_____

_____

_____

Signature: _____

Date: _____

Note: Attach copy of Manifest(s).

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

FIGURE 6-12
CHLORINATED HYDROCARBON RAILCAR CONTAINER TRANSFER REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 14

OCCIDENTAL CHEMICAL CORPORATION
TACOMA PLANT

WEEKLY WASTE PILE INSPECTION REPORT

Inspector's Name/Title:_____

Date and Time of Inspection:_____

Weather Conditions:

Temperature:_____ Wind:_____
General:_____

INSPECTION CHECKLIST

Inspection Procedures	Status: Normal	Problem	Comments
Waste pile is free from liquids (check floor area)			
Curtain is free from rips or holes			
Curtain is closed			
Velcro center fastener is fastened and apron of curtain is extended out over berm			
No evidence of leaks through the walls, roof, or curtain of the building			
Asphalt rollover berm is in good condition			
Waste material swept away from berm (inside)			
Area outside building is free of any spilled material			

Remedial Actions Necessary? Yes No

If yes, describe remedial actions needed:_____

_____

_____

_____

_____

Who contacted?_____

Date remedial work completed:_____

Signature and date:_____

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name etc.) of these inspection forms.

FIGURE 6-13
WEEKLY WASTE PILE INSPECTION REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 15

(Revised December 1986)

WASTE PILE SHIPPING AND POSTSHIPMENT REPORT

Occidental Chemical Corporation
Tacoma Plant

Date: _____
By: _____
Time Loading Commenced: _____ Weather Conditions:
Time Completed: _____ Temperature: ____ Wind: ____
General: _____

Empty Weight of Trucks: Truck #1 _____ Final Weights: _____
Truck #2 _____ _____
Manifest Numbers: Truck #1 _____
Truck #2 _____

General Observations
Front End Loader: (Operator Name) _____
Trucks Properly Lined with Plastic? Yes No
Is Loading Area Wet or Dry? _____
Number of Intermediate Weighings: Truck #1 _____ Truck #2 _____
Trucks Properly Covered Prior to Leaving Site? Yes No
- o If no, describe: _____

Any Material Spilled During Loading? Yes No
- o If yes, describe: _____
- o Remedial Action Taken: _____

Front End Loader Decontaminated? Yes No

Post-Loading Inspection of Waste Pile Building
Roll-over Apron Cleaned and Swept? Yes No
All Waste Removed During Shipment? Yes No
Any Liquids on Floor? Yes No
- o If yes, describe: _____
- o Remedial Action Taken: _____

Describe Condition of Floor, Plywood Skidplate, Curtain, Exterior Walls, Roof, etc. (note any cracks or other apparent deterioration):

_____

Any Remedial Action Required? Yes No
- o If yes, describe: _____
- o Who contacted? _____
- o Date to be completed? _____

Other Comments

_____

Signature and Date: _____

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate at a minimum the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OSC reserves the right to change the format and reading of outside contractor's name on these inspection forms.

FIGURE 6-14
WASTE PILE SHIPPING AND POSTSHIPMENT REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 16

(Revised December 1986)

OCCIDENTAL CHEMICAL CORPORATION
TACOMA PLANT

5-YEAR WASTE PILE INSPECTION REPORT

Inspector's Name/Title: _____

Date and Time of Inspection: _____

Weather Conditions:

Temperature: _____ Wind: _____
General: _____

INSPECTION CHECKLIST

Inspection Procedures	Status		
	Normal	Problem	Comments
Waste pile is free from liquids (check floor area)			
Curtain is free from rips or holes			
Curtain is closed			
Velcro center fastener is fastened and apron of curtain is extended out over berm			
No evidence of leaks through the walls, roof, or curtain of the building			
Asphalt rollover berm is in good condition			

The forms provided for performance of general facility inspections, specific inspections of regulated management units, and emergency equipment, designate, at a minimum, the potential problem areas to be evaluated and the information to be recorded to document these evaluations and remedial follow-up as warranted. OCC reserves the right to change the format and heading (i.e., outside contractor's name, etc.) of these inspection forms.

FIGURE 6-15
5-YEAR WASTE PILE INSPECTION REPORT
Occidental Chemical Corporation
Tacoma, WA

ATTACHMENT 17

Appendix 8-E
Contact Letters

Appendix 8-E

CONTACT LETTERS

The contact letters provided in this appendix will be mailed to the respective agencies upon issuance of the RCRA operating permit to OCC. Where indicated, the effective date of the permit will be inserted into the letters that are actually mailed.

Previous contact letters and return correspondence are provided in Appendix 8-F.

Occidental Chemical Corporation

(letter to be dated and mailed upon permit issuance)

City of Tacoma Fire Department
901 Fawcett Avenue
Tacoma, Washington 98402

Attention: Emergency Service

Enclosed is a copy of the finally effective Contingency Plan that has been prepared for the Occidental Chemical Corporation (Occidental) Tacoma plant. This plan addresses responsibilities and activities for emergency response at the Occidental plant in the event of an incident involving hazardous or dangerous waste materials from one or more of the hazardous waste management units located on the Tacoma Plant premises.

This plan has been prepared in response to U.S. Environmental Protection Agency regulations 40 CFR 270 and 264, and Washington State Department of Ecology regulations WAC 173-303-350 through 360. This plan became effective upon issuance of an operating permit to Occidental on (insert date of permit issuance here).

The enclosed plan replaces that which was sent to you on June 16, 1986. The enclosed plan supersedes and replaces all previous plans sent to you.

Under the regulations noted above, Occidental is required to seek confirmation agreements from local emergency response organizations that, upon request, they are capable of providing support to us in the event of an emergency situation involving a release of hazardous wastes at one of the management units for which Occidental has a hazardous waste management permit.

The specific confirmation agreement (nonbinding) that Occidental is seeking from the Tacoma Fire Department is that your organization is capable of providing the following assistance to us in the event the Contingency Plan is implemented.

- General and specialized chemical firefighting capabilities
- Hazardous materials (HazMat) response assistance
- Consultative assistance for planning or implementing emergency response
- Paramedic services
- Evacuation of neighboring community and/or facilities
- Coordination assistance with other response organizations (e.g., Tacoma Police Department)

By this letter, Occidental is requesting a renewal of your commitment to participate in emergencies involving hazardous waste at the Tacoma Plant. If your organization will be capable of providing the assistance noted above, please sign and return the enclosed copy of this letter, or reply by separate correspondence.

Occidental Chemical Corporation appreciates your willingness to provide continued assistance to us. If you have any questions, please feel free to call Bob Hartman, Environmental Control Manager, at 593-1359.

Sincerely,

Harry Schmidt
Plant Manager

td:se5770/021
Enclosure: Contingency Plan

Acknowledgement of response assistance: I have read and am familiar with the Contingency Plan provided to me by Occidental Chemical Corporation's Tacoma Plant. I acknowledge

that my organization is capable of providing the forms of emergency assistance noted in this letter, and will respond upon request.

_____ _____
Signature Date

_____
Printed Name and Title

_____
Agency or Organization Name

Occidental Chemical Corporation

(letter to be dated and mailed upon permit issuance)

Tacoma General Hospital
315 South K Street
Tacoma, Washington 98405

Attention: Director, Emergency Services

Enclosed is a copy of the finally effective Contingency Plan that has been prepared for the Occidental Chemical Corporation (Occidental) Tacoma plant. This plan addresses responsibilities and activities for emergency response at the Occidental plant in the event of an incident involving hazardous or dangerous waste materials from one or more of the hazardous waste management units located on the Tacoma Plant premises.

This plan has been prepared in response to U.S. Environmental Protection Agency regulations 40 CFR 270 and 264, and Washington State Department of Ecology regulations WAC 173-303-350 through 360. This plan became effective upon issuance of an operating permit to Occidental on (insert date of permit issuance here).

The enclosed plan replaces that which was sent to you on June 16, 1986. The enclosed plan supersedes and replaces all previous plans sent to you.

Under the regulations noted above, Occidental is required to seek confirmation agreements from local emergency response organizations that, upon request, they are capable of providing support to us in the event of an emergency situation involving a release of hazardous wastes at one of the management units for which Occidental has a hazardous waste management permit.

The specific confirmation agreement (nonbinding) that Occidental is seeking from the Tacoma General Hospital is that

OxyChem
Industrial & Specialty Chemicals Group

your facility is capable of providing the following services to injured or potentially injured personnel:

- o Emergency room diagnosis and initial treatment
- o Post-emergency care and recuperative treatment

For your convenience, I have attached spill response or material safety data sheets for those materials for which we need specific confirmation that you have the capability to provide the services noted above. If in an emergency your organization will provide support upon request, please sign the enclosed copy of this letter and return, or reply by separate correspondence.

Occidental Chemical Corporation appreciates your willingness to provide continued assistance to us. If you have any questions, please feel free to call Bob Hartman, Environmental Control Manager, at 593-1359.

Sincerely,

Harry Schmidt
Plant Manager

td:se5770/022
Attachment: Spill Response Sheets
Enclosure: Contingency Plan

Acknowledgement of response assistance: I have read and am familiar with the Contingency Plan provided to me by Occidental Chemical Corporation's Tacoma Plant. I acknowledge

that my organization is capable of providing the forms of emergency assistance noted in this letter, and will respond upon request.

Signature	Date

Printed Name and Title

Agency or Organization Name

Occidental Chemical Corporation

(letter to be dated and mailed upon permit issuance)

City of Tacoma Police Department
930 Tacoma Avenue South
Tacoma, Washington 98402

Attention: Emergency Service

Enclosed is a copy of the finally effective Contingency Plan that has been prepared for the Occidental Chemical Corporation (Occidental) Tacoma plant. This plan addresses responsibilities and activities for emergency response at the Occidental plant in the event of an incident involving hazardous or dangerous waste materials from one or more of the hazardous waste management units located on the Tacoma Plant premises.

This plan has been prepared in response to U.S. Environmental Protection Agency regulations 40 CFR 270 and 264, and Washington State Department of Ecology regulations WAC 173-303-350 through 360. This plan became effective upon issuance of an operating permit to Occidental on (insert date of permit issuance here).

The enclosed plan replaces that which was sent to you on June 16, 1986. The enclosed plan supersedes and replaces all previous plans sent to you.

Under the regulations noted above, Occidental is required to seek confirmation agreements from local emergency response organizations that, upon request, they are capable of providing support to us in the event of an emergency situation involving a release of hazardous wastes at one of the management units for which Occidental has a hazardous waste management permit.

The specific confirmation agreement (nonbinding) that Occidental is seeking from the Tacoma Police Department is that your organization is capable of providing the following assistance to us in the event the Contingency Plan is implemented.

OxyChem
Industrial & Specialty Chemicals Group
605 Alexander Avenue, Box 215[illegible] Tacoma, Washington 98401

- Evacuation of neighboring facilities and/or community, if necessary
- Traffic control in the vicinity of the plant
- Assistance in providing site security and access control
- Coordination assistance with other response organizations (e.g., Tacoma Fire Department)

By this letter, Occidental is requesting a renewal of your commitment to participate in emergencies involving hazardous waste at the Tacoma Plant. If your organization will be capable of providing the assistance noted above, please sign and return the enclosed copy of this letter, or reply by separate correspondence.

Occidental Chemical Corporation appreciates your willingness to provide continued assistance to us. If you have any questions, please feel free to call Bob Hartman, Environmental Control Manager, at 593-1359.

Sincerely,

Harry Schmidt
Plant Manager

td:se5770/023
Enclosure: Contingency Plan

Acknowledgement of response assistance: I have read and am familiar with the Contingency Plan provided to me by Occidental Chemical Corporation's Tacoma Plant. I acknowledge

that my organization is capable of providing the forms of emergency assistance noted in this letter, and will respond upon request.

_____ _____
Signature Date

_____
Printed Name and Title

_____
Agency or Organization Name